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Water Resources Data for New York, Water Year 1982
Volume 3. Western New York

(U.S.) Geological Survey, Albany, NY

Apr 83

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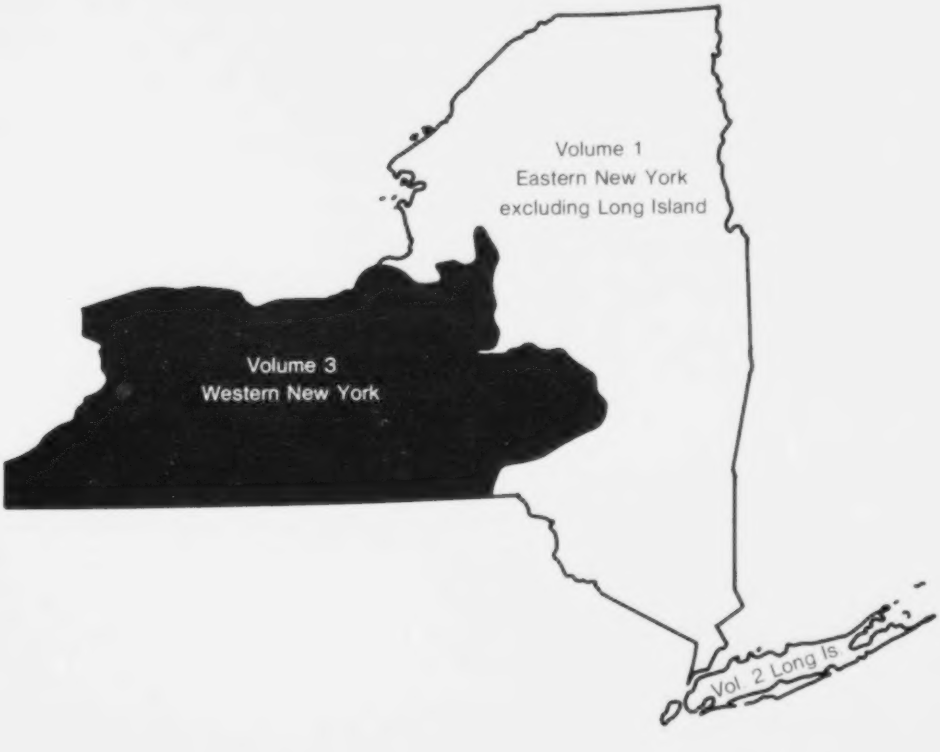
Volume 3. Western New York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Eastern New York
excluding Long Island
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Western New York
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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-82-3
Prepared in cooperation with the State of New York
and with other agencies

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CALENDAR FOR WATER YEAR 1982

1981

OCTOBER

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1982

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DEPARTMENT OF THE INTERIOR
March 3 1849

Water Resources Data New York

Water Year 1982

Volume 3. Western New York

by J.B. Hood, W.H. Johnston, H.J. Zajd, Jr., and H.L. Dixson

Volume 1
Eastern New York
excluding Long Island
Volume 3
Western New York
Vol. 2 Long Is.

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-82-3
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I

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in New York write to
District Chief, Water Resources Division
U.S. Geological Survey
U.S. Post Office and Courthouse
P.O. Box 1350
Albany, New York 12201
1983

PREFACE

This volume of the annual hydrologic data report of New York is one of a series of annual reports that document hydrologic data gathered from the U. S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for New York are contained in three volumes:

Volume 1. Eastern New York excluding Long Island
Volume 2. Long Island
Volume 3. Western New York

In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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WATER RESOURCES DATA FOR NEW YORK, 1982
Volume 3.--Western New York

INTRODUCTION

Water resources data for the 1982 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; quality of precipitation; and water levels of ground-water wells. This volume contains records for water discharge at 88 gaging stations; stage only at 14 gaging stations; stage and contents at 6 gaging stations and 2 other lakes and reservoirs; water quality at 14 gaging stations, 4 quality of precipitation stations; and water levels at 19 observation wells. Also included are data for 59 crest-stage and 2 low-flow partial-record stations. Locations of these sites are shown on figure 4. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. These data together with the data in Volumes 1 and 2 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NY-82-3." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-3107.

COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative agreements for the systematic collection of water records since 1900. Organizations that assisted in collecting data included in Volume 3, water year 1981, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
New York State Education Department
County of Chautauqua, Planning Department
County of Cortland, Planning Department
County of Monroe, Department of Health
County of Monroe, Division of Engineering
County of Monroe, Water Authority
County of Onondaga, Department of Public Works
County of Onondaga, Water Authority Commission
City of Auburn
City of Rochester, Water Bureau
Irondequoit Bay Pure Waters District

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the U.S. Army Corps of Engineers, the Environmental Protection Agency, and the Susquehanna River Basin Commission.

The following organizations aided in collecting records:

Municipalities of Batavia, Canandaigua, Cortland, Jamestown, Lancaster, Oneida, Rochester, Syracuse; Cornell University; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Rochester Gas and Electric Corp.; Rushford Lake Recreation District.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

The 1982 water year in western New York was highlighted in October by above-average precipitation and record-breaking floods in some areas. Below-average precipitation each month from November to May caused a slow decline in runoff from October highs to below-normal by May (figs. 2 and 3). January's average air temperature was 15°F, which was 8°F below average. Continued slightly below average monthly temperatures in February and March resulted in substantial ice buildups and caused stream discharges to decrease sharply. Thunderstorms in late May and above-average precipitation in June increased runoff rates to above normal. Below-average precipitation in July and August and near-normal precipitation in September returned runoff to normal or slightly below normal levels, by the end of September.

A series of intense thunderstorms on October 27 and 28, 1981, centered in Chenango, Cortland, Tompkins, and Onondaga Counties, washed out bridges and caused extensive property damage. Flood damage also was reported in the Wellsville and Syracuse areas. Total rainfall from this storm ranged from 3 to 6 inches. On the morning of October 28, the 24-hour rainfall totaled 3.44 inches at Cortland, 3.80 inches at Tully, 4.79 inches at Freeville, and 5.08 inches at Ithaca. This storm produced the highest discharge in the ten to fifteen years of record at West Branch Tioughnioga River at Homer, Sixmile Creek near Ithaca, Virgil Creek at Dryden, and Virgil Creek at Freeville. The flood peaks at Chenango River at Sherburne and Limestone Creek at Fayetteville were the highest in the 42 years of record at those stations.

On March 13, flooding from massive ice jams at the mouth of Cattaraugus Creek damaged more than 100 homes and forced about 300 residents to be evacuated from the community of Sunset Bay.

Storage in reservoirs was generally adequate throughout the water year.

Ground-water levels in western New York were generally normal at the beginning of the water year but rose to the above normal range in the greater Finger Lakes area as a result of the late October thunderstorm and resultant high runoff. During most of the winter, seasonal ground-water levels in the Finger Lakes area declined from earlier highs, whereas normal recharge maintained levels in the snow-belt counties. Unseasonably high temperatures and rains in mid-February and early March caused rapid snowmelt and replenished ground water to normal spring levels. Heavy precipitation in late May raised ground-water levels slightly above the normal range as the growing season started. Subsequent below-average precipitation in July and August and near-normal precipitation in September caused ground-water levels to decline to slightly below the normal range by the end of the water year.

Water-quality and discharge data from the five NASQAN stations in western New York indicated no significant changes in chemical quality from previous years; however, an indication of deteriorated biological quality was noted at two sites. On October 6, 1981 and July 21, 1982, the Genesee River at Rochester had a fecal coliform count of 140,000 per 100 mL and 24,000 per 100 mL, respectively. The bacteria count on October 6, 1981, was the highest observed for the period of record. Tonawanda Creek at Batavia had fecal coliform and fecal streptococci counts of 8,900 per 100 mL and 16,000 per 100 mL, respectively, on November 17, 1981. These counts were the highest observed for the period of record at this site.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound system units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material See Bottom material.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Bottom material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material".

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceos organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium, for example water, that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (μg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organic carbon (OC) is a measure of the organic matter present in aqueous solution and (or) suspension. May be reported in any of three categories (DOC, dissolved organic carbon; SOC, suspended organic carbon; TOC, total organic carbon).

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottomwithdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water (chemically dispersed).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or Sieve
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. The sample is subjected to mechanical and chemical dispersion in distilled water before analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of algae, fungi, and bacteria which are attached to or live upon submerged objects in lakes and rivers.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

Fire algae (Pyrrhophyta) are free-swimming unicells characterized by a red spot.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated napthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated napthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m^2.time) for periphyton and macrophytes and mg C/(m^3.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O_2/(m^2.time) for periphyton and macrophytes and mg O_2/(m^3.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occuring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization or organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in table of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	*Hexageria*
Species	*Hexagenia limbata*

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total (as used in tables of chemical analyses):

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative watersuspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station, partial-record station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01502500 includes the 2-digit part number "01" plus the 6-digit downstream order number "502500". In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9- or 10-digit station number) and (or) a latitude-longitude number was used for identification.

NUMBERING SYSTEM FOR WELLS

The 8-digit downstream order station numbers are not assigned to wells. The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 1 below.

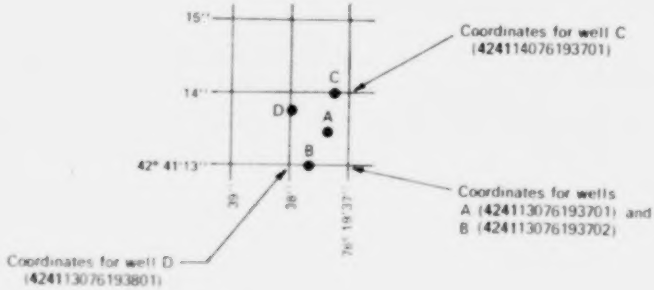

15''
14''
42° 41'13''
39''
38''
76° 19'37''
C
D
A
B
Coordinates for well C (424114076193701)
Coordinates for wells A (424113076193701) and B (424113076193702)
Coordinates for well D (424113076193801)

Figure 1. System for numbering wells (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consulation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stagedischarge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shiftingcontrol method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and computing the discharge in the usual manner yield incorrect results. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The daily contents are computed from gage heights and capacity tables, then the daily, monthly, and yearly change of contents are computed from the daily figures.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage for some stations, given under "LOCATION", is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a "REVISED RECORDS" paragraph has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in the section, "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The table of daily discharge for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the table, the "TOTAL" line gives the sum of the daily figures. The "MEAN" line gives the average flow in cubic feet per second during the month. The "MAX" and "MIN" lines give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile ("CFSM" line), or in inches ("IN." line). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stagedischarge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER-QUALITY RECORDS

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the location of the water quality sampling site differs significantly from that of the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites. Data for precipitation-quality stations appear next. The table of ground-water quality data follows the ground-water level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number.

Descriptive Headings

For continuing record stations, data are preceded by information pertinent to the history of station operation. These descriptive headings give details regarding locations, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Headings for precipitation-quality records include location information and a description of the sample collector.

Categories of Water-Quality Data

There is a broad range of water-quality parameters available for most stations whose record exceeds more than a few years operation. Sampling schedules are often intermittant for certain types of data, with analyses available for some but not all years within a stations's period of record. An acurate description of the variety of data available is shown by grouping similar parameters into a few general categories, which are listed in the "PERIOD OF RECORD" paragraph. Each category of data is followed by a notation of the water year(s) for which data is available and a letter code describing the frequency of sampling (see following section, "Frequency-of-Sampling Notation").

The "PERIOD OF RECORD" paragraph lists the following categories of data to describe information available.

CHEMICAL DATA: Usually includes most of the "major ions", and may often include some of the following physical properties: specific conductance, pH, temperature, color, turbidity, dissolved oxygen.

MINOR ELEMENT DATA: Comprises the "heavy metals" and some of the "alkaline earth" groups. Determinations usually include some but not all of the following: Al, As, Ba, Cd, Cr, Co, Cu, Hg, Li, Ni, Pb, Se, Sn, Sr, Zn.

RADIOCHEMICAL DATA: The determinations of the concentration of individual radioactive elements, such as radium 226, cobalt 60, strontium 90, and tritium. This category also includes the gross mesurement of radioactivity (alpha, beta, gamma) without regard to the radiochemical species that produce the radioactivity.

PESTICIDE DATA: The organic compounds (insecticides and herbicides) used to control insects and plants. Routinely, the analyses searches for traces of between 12 to 22 compounds.

ORGANIC DATA: Organic data (other than pesticides) such as OC, PCB, PCN.

NUTRIENT DATA: Constituents containing nitrogen or phosphorus. Results usually include several of the following: nitrite plus nitrate, phosphorus, ammonia nitrogen, organic nitrogen, ammonia nitrogen plus organic nitrogen (Kjeldahl nitrogen).

BIOLOGICAL DATA: The identification and concentration of microscopic plant organisms (phytoplankton, periphyton), or enteric bacteria (total coliform, fecal coliform, or fecal streptococcal) living in aquatic habitats.

SEDIMENT DATA: Suspended-sediment concentration, suspended-sediment discharge, and particle-size data for discrete samples.

Frequency-of-Sampling Notation

The categories of data given in the "PERIOD OF RECORD" paragraph are followed by the water year(s) for which that kind of data was collected. The amount of data available is specified by the following letter codes:

(a) 1 or 2 samples per year.
(b) 3 to 5 samples per year.
(c) 6 to 9 samples per year.
(d) 10 to 20 samples per year.
(e) more than 20 samples per year.

Thus, "CHEMICAL DATA: 1972-74(c), 1977-82(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the five most recent years.

Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on page 17.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Terminology used in reporting chemical constituents is an indication of whether all or only part of a constituent associated with the solids in a water-quality sample is determined by a chemical analysis. (See preceding section, "Definition of Terms.") The "recoverable" in the terms "Suspended, recoverable", "Total, recoverable", and "Recoverable from bottom material" indicates that the constituent was digested by a method that results in the dissolution of only readily soluble substances. Thus, the determination may not represent all of the constituent actually present in the sample. The "total" in the terms "Total", "Suspended, total", and "Total in bottom material" is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures and/or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

Ground-water level data consist of water-level measurements made in observation wells. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported as mean daily values, then monthly and yearly means are computed from the daily figures. Water levels in wells not equipped with recording gages are measured periodically, usually weekly, with a weighted tape.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot.

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett Street, Arlington, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office). NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS-TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS-TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite-difference model for aquifer simulation in two dimensions with results of* numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion of ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

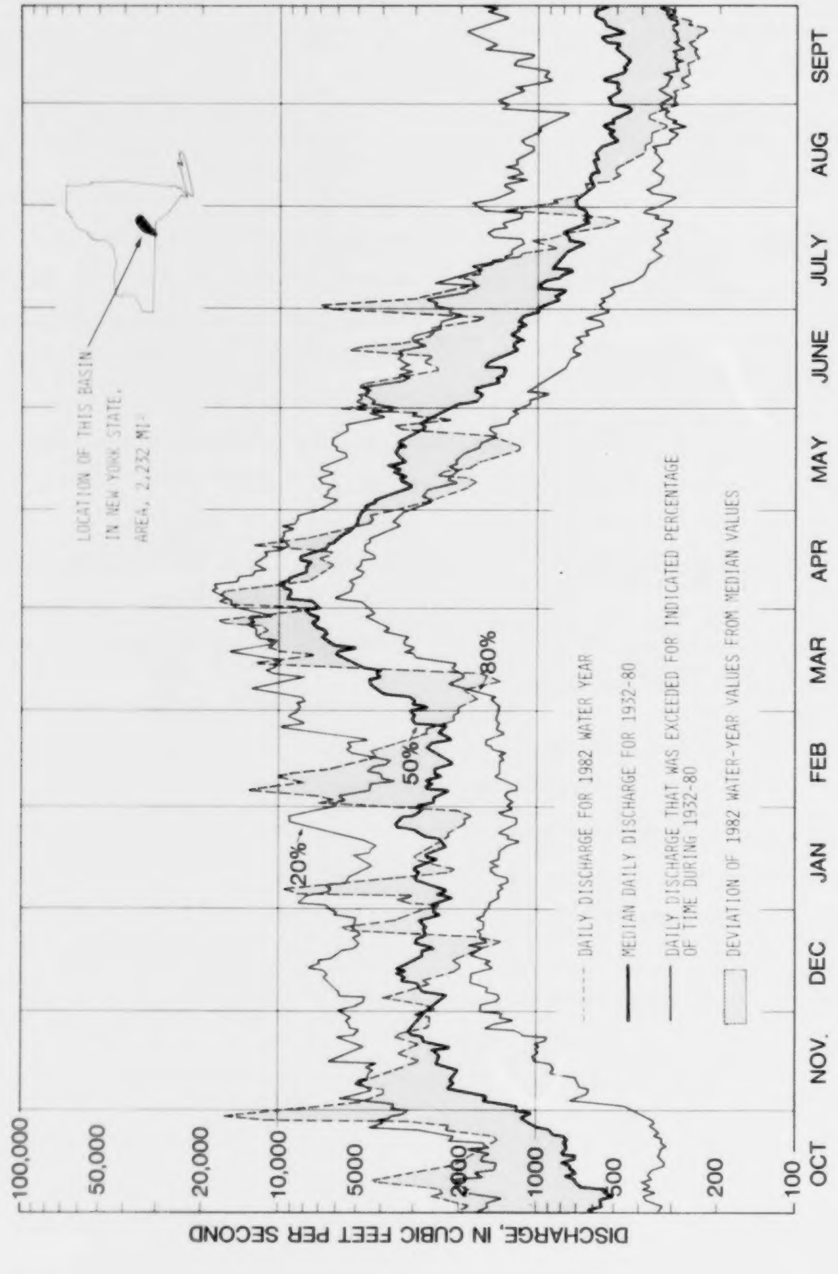


Figure 2.--Hydrographic comparisons, Susquehanna River at Conklin, N.Y.

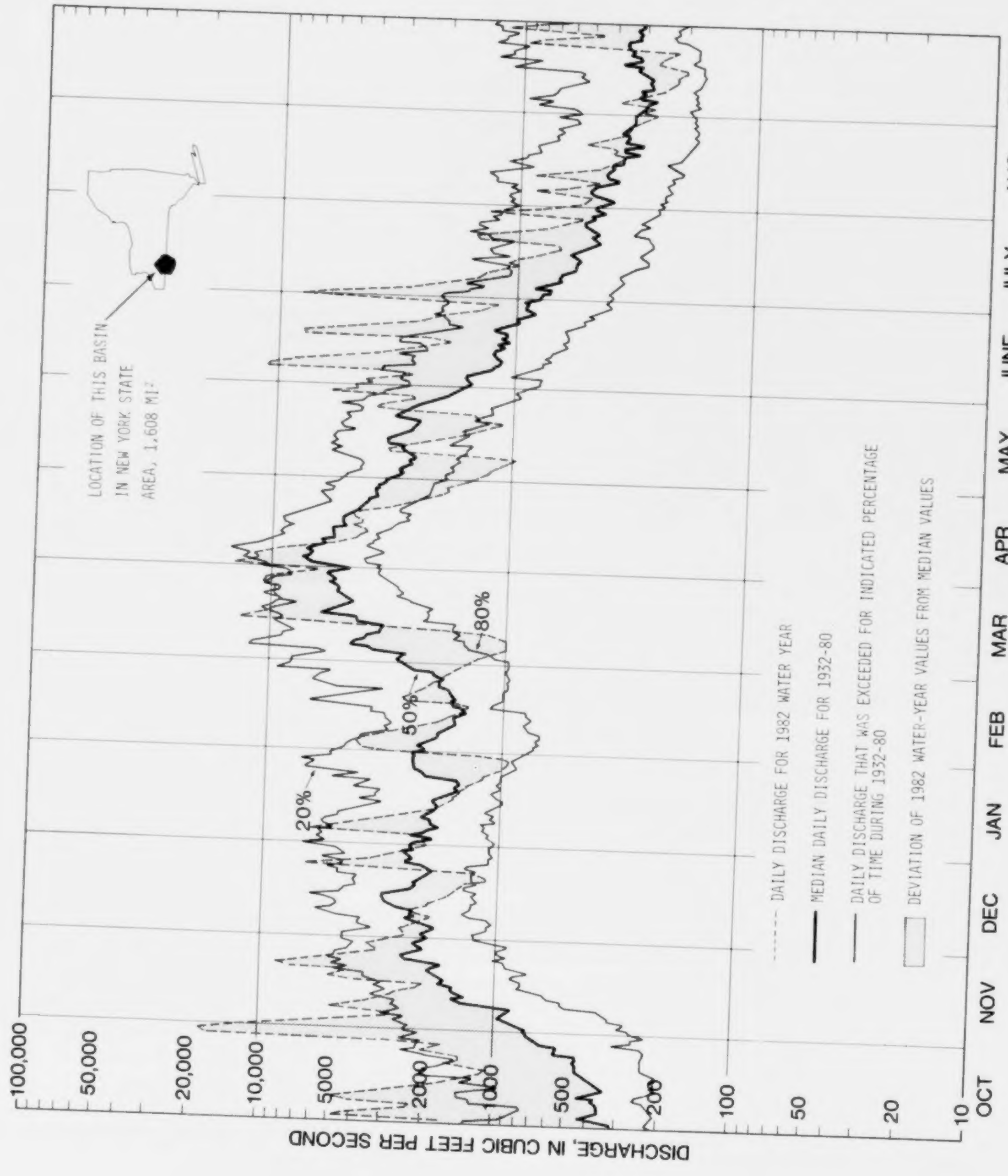


Figure 3.--Hydrographic comparisons, Allegheny River at Salamanca, N.Y.

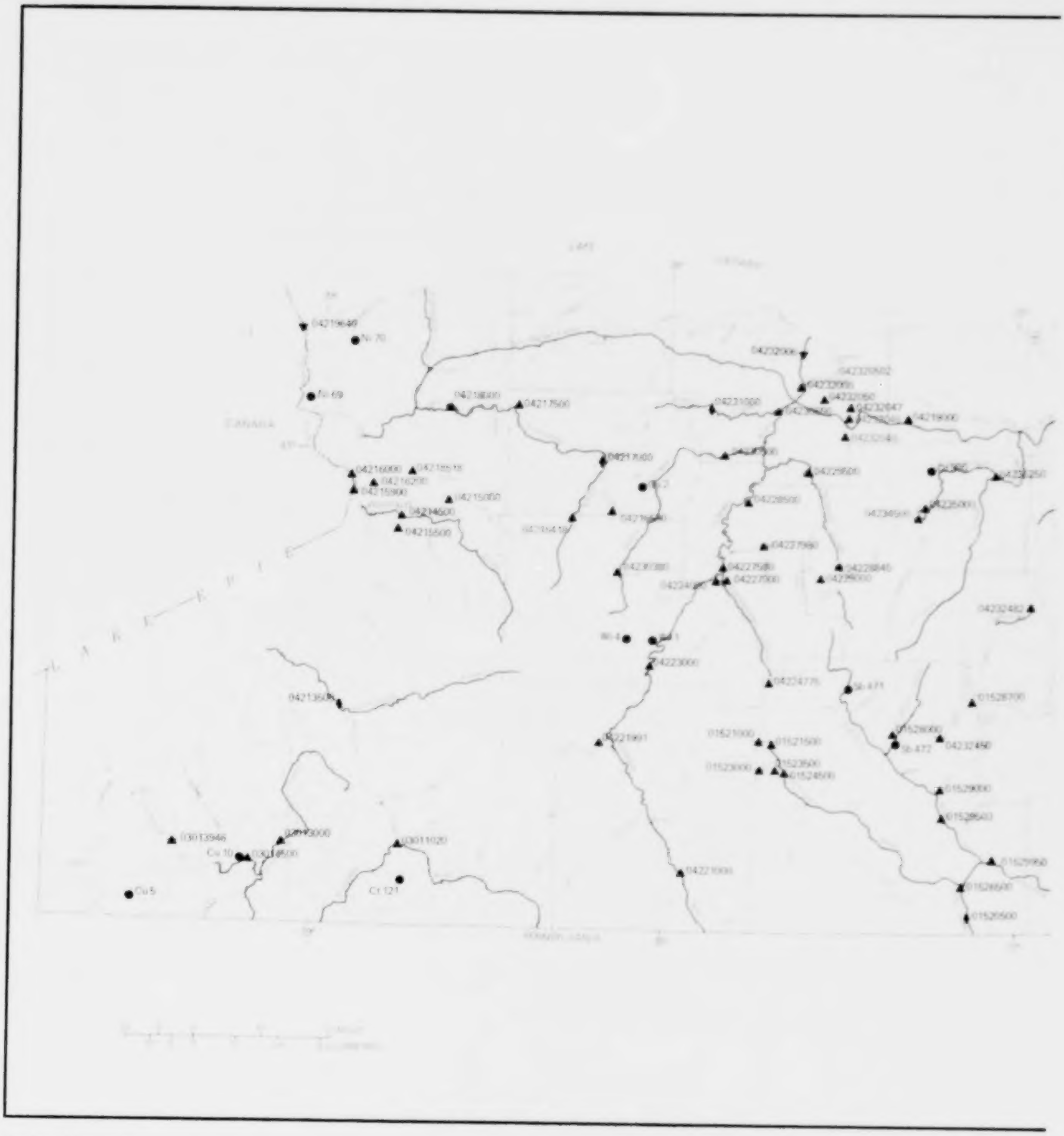
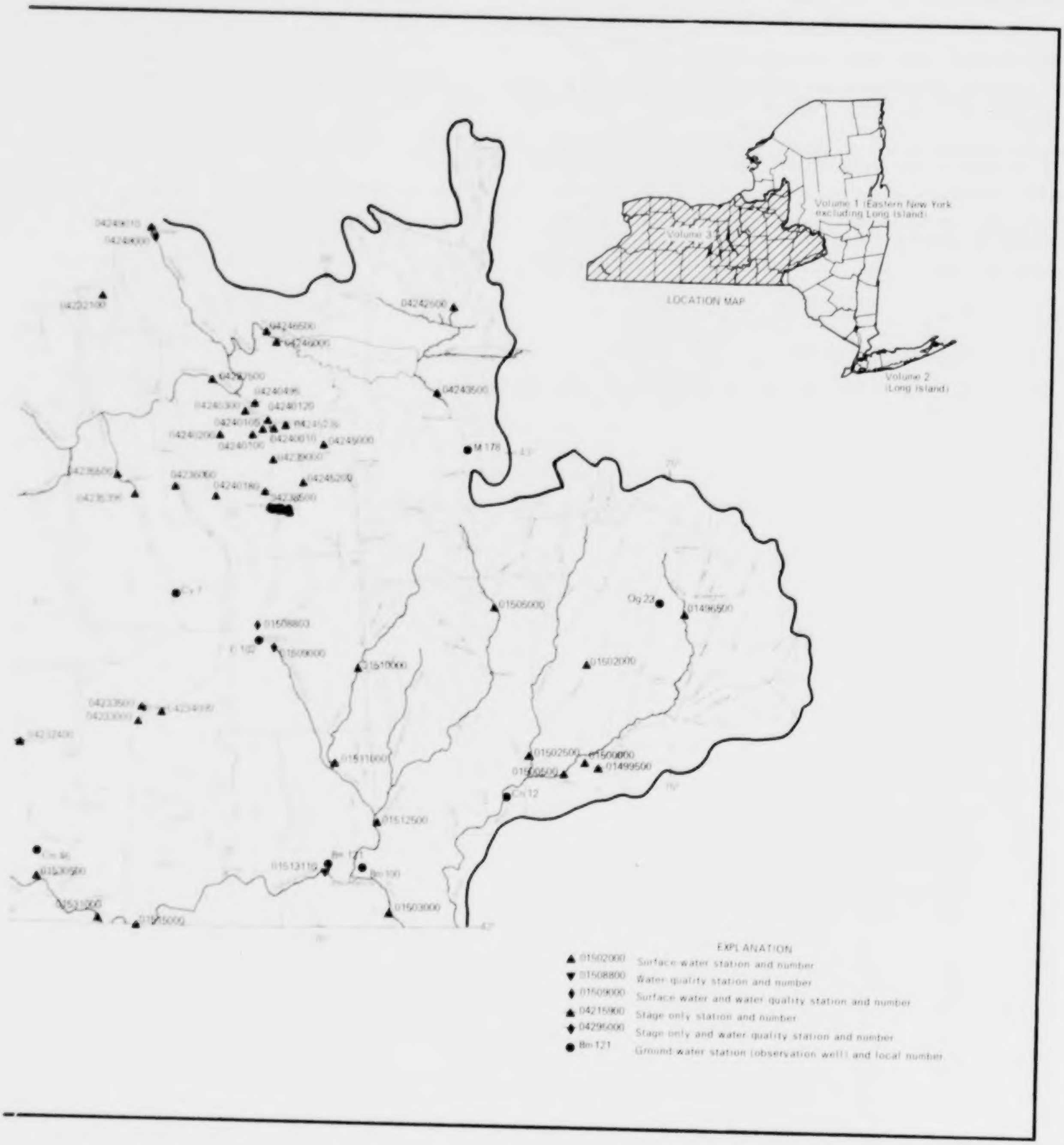

04219640
Ni 70
Ni 69
CANADA
04218000
04217500
04217000
04216000
04216200
04215900
04218518
04215000
04214500
04215500
L A K E E R I E
04213500
03013946
Cu 10
03014500
03011020
Cu 5
Ct 121
04232006
04232050
04232047
04219000
04231000
04225500
04228500
04227980
04227500
04227000
04228840
04232482
04223000
04224775
Sb 471
01528700
04221991
01521000
01521500
01523000
01523500
01524500
01526000
Sb 472
04232450
01529000
01529950
01526500
01520500
04221000

FIGURE 4.-- LOCATION OF GAGING STATIONS


Volume 1 (Eastern New York excluding Long Island)
Volume 3
LOCATION MAP
Volume 2 (Long Island)
04249010
04249000
04232100
04242500
04246500
04246000
04237500
04240495
04240300
04240120
04240105
04240010
04249000
04240100
04239000
04243500
M 178
04235600
04235300
04236000
04240180
04238500
04245200
Cy 7
01508803
E 102
01509000
01510000
01505000
Og 23
01496500
01502000
04233500
04233000
04234000
04232400
01511000
01502500
01500000
01505500
01499500
Cn 12
01512500
Ch 46
01530500
01513110
Bm 121
Bm 100
01531000
01515000
01503000
EXPLANATION
01502000 Surface-water station and number
01508800 Water-quality station and number
01509000 Surface water and water quality station and number
04215900 Stage only station and number
04295000 Stage only and water quality station and number
Bm 121 Ground water station (observation well) and local number

AND OBSERVATION WELLS IN WESTERN NEW YORK

01496500 OAKS CREEK AT INDEX, NY

LOCATION.--Lat 42°39'56", long 74°57'36", Otsego County, Hydrologic Unit 02050101, on right bank 200 ft (61 m) upstream from bridge on State Highway 28 at Index, 0.5 mi (0.8 km) upstream from mouth, and 3 mi (5 km) southwest of Cooperstown.

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--November 1929 to September 1932, March 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,174.50 ft (357.988 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1932, nonrecording gage at different datum.

REMARKS.--Records excellent except those for winter periods, which are fair. Prior to June 1964, flow regulated by natural storage in Canadarago Lake, thereafter by dam at outlet.

AVERAGE DISCHARGE.--47 years (1931-32, 1938-82), 172 ft³/s (4.871 m³/s), 22.90 in/yr (582 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,320 ft³/s (94.0 m³/s) Oct. 17, 1977, gage height, 7.62 ft (2.323 m); minimum discharge, 1.3 ft³/s (0.037 m³/s) Aug. 4, 5, 1962, gage height, 1.79 ft (0.546 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	1730	1,010	28.6	5.08	1.548
Mar. 26	1700	985	27.9	5.05	1.539
Apr. 1	0600	1,470	41.6	5.67	1.728
Apr. 4	0600	*1,600	45.3	*5.82	1.774

Minimum discharge, 4.6 ft³/s (0.13 m³/s) Sept. 5-6, gage height, 2.11 ft (0.643 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	402	170	104	230	98	1300	299	124	232	16	5.1
2	234	387	190	100	220	106	1180	276	160	223	16	5.8
3	230	365	200	90	200	94	1130	257	137	217	17	5.5
4	222	343	190	181	290	90	1450	237	135	208	16	5.5
5	206	323	180	305	340	108	1170	217	133	197	14	4.9
6	202	348	170	250	310	100	1000	172	181	184	14	13
7	222	349	160	233	250	99	900	95	162	170	13	23
8	273	320	150	210	240	90	800	88	145	235	12	20
9	244	307	140	200	250	88	740	105	133	184	12	20
10	227	289	140	180	210	90	646	161	123	162	19	18
11	216	277	130	170	190	100	593	122	115	150	18	17
12	208	260	130	160	170	139	538	114	116	140	16	16
13	199	242	120	150	160	178	514	116	187	128	14	15
14	191	232	120	140	140	285	530	107	201	83	13	14
15	182	226	110	130	150	220	502	100	180	84	12	14
16	173	221	110	120	154	288	498	94	167	84	12	14
17	164	210	100	110	155	317	555	88	310	43	12	12
18	154	202	100	110	150	332	759	83	251	34	10	11
19	153	201	96	100	149	367	668	79	215	35	9.2	10
20	144	205	94	100	140	373	621	110	204	37	8.3	9.6
21	132	220	90	96	130	434	599	118	194	35	7.9	9.2
22	126	210	97	94	130	482	559	98	184	32	7.5	8.7
23	133	200	153	90	120	477	515	206	189	30	7.2	9.6
24	162	190	190	86	110	509	473	288	175	27	6.8	8.7
25	136	180	163	84	98	595	436	256	155	23	7.2	6.8
26	135	184	143	82	96	858	395	199	87	21	7.2	6.5
27	319	197	80	80	94	731	412	119	78	19	6.2	6.8
28	705	199	76	78	94	619	378	110	73	22	5.8	6.8
29	562	190	72	80	---	594	347	115	137	23	5.1	6.2
30	450	180	74	90	---	612	323	115	258	19	4.9	5.8
31	423	---	77	110	---	818	---	125	---	16	5.1	---
TOTAL	7348	7659	4015	4113	4970	10291	20531	4669	4909	3097	344.4	328.5
MEAN	237	255	130	133	178	332	684	151	164	99.9	11.1	11.0
MAX	705	402	200	305	340	858	1450	299	310	235	19	23
MIN	126	180	72	78	94	88	323	79	73	16	4.9	4.9
CFSM	2.32	2.50	1.28	1.30	1.75	3.26	6.71	1.48	1.61	.98	.11	.11
IN.	2.68	2.79	1.46	1.50	1.81	3.75	7.49	1.70	1.79	1.13	.13	.12

CAL YR 1981 TOTAL 56484.1 MEAN 155 MAX 1260 MIN 7.2 CFSM 1.52 IN 20.60
WTR YR 1982 TOTAL 72274.9 MEAN 198 MAX 1450 MIN 4.9 CFSM 1.94 IN 26.36

01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY

LOCATION.--Lat 42°19'40", long 75°13'42", Delaware County, Hydrologic Unit 02050101, at East Sidney Dam on Ouleout Creek, 0.3 mi (0.5 km) upstream from bridge on County Highway 44 at East Sidney, 4.0 mi (6.4 km) upstream from mouth, and 4.5 mi (7.2 km) east of Unadilla.

DRAINAGE AREA.--103 mi² (267 km²).

PERIOD OF RECORD.--November 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "East Sidney Reservoir at East Sidney."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1979, datum 0.05 ft (0.015 m) lower.

REMARKS.--Lake is formed by concrete dam and rockfill dike, completed by Corps of Engineers in June 1950; regulation of outflow began in November 1949; first used for flood regulation on Mar. 28, 1950. Useable capacity, 33,550 acre-ft (41.4 hm³) between elevations 1,115.0 ft or 339.85 m (sill of conduits) and 1,203.0 ft or 366.67 m (crest of spillway). Dead storage 56 acre-ft (0.07 hm³). Discharge is controlled by the operation of five gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,194.4 ft (364.05 m) Apr. 6, 1960, contents, 25,100 acre-ft (30.9 hm³); minimum, 1,115.0 ft (339.85 m) Aug. 31, 1953, Sept. 7-26, Nov. 4, 1964, contents, 56 acre-ft (0.07 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,168.32 ft (356.104 m) Feb. 7, contents, 8,915 acre-ft (11.0 hm³); minimum, 1,139.01 ft (347.170 m) Mar. 14, contents, 1,508 acre-ft (1.86 hm³).

Capacity table (elevation, in feet, and useable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1938)

1,135.0	1,080		
1,140.0	1,630	1,160.0	5,910
1,145.0	2,360	1,170.0	9,610
1,150.0	3,280	1,180.0	14,610
		1,190.0	21,370

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150.25	1150.59	1149.08	1140.57	1141.66	1140.36	1142.04	1145.37	1150.29	1150.12	1150.29	1150.23
2	1150.55	1150.81	1148.13	1140.41	1140.75	1140.50	1140.31	1146.13	1150.36	1150.10	1150.17	1150.23
3	1150.82	1150.30	1146.37	1140.43	1141.71	1140.53	1140.79	1146.78	1150.44	1150.32	1150.19	1150.22
4	1150.56	1150.21	1144.57	1141.23	1155.96	1140.30	1141.21	1147.38	1150.33	1150.48	1150.19	1150.20
5	1150.31	1150.14	1143.99	1141.85	1162.74	1140.35	1140.62	1147.91	1150.15	1150.53	1150.16	1150.19
6	1150.42	1150.52	1143.47	1141.05	1166.06	1140.81	1140.10	1148.54	1150.04	1150.46	1150.23	1150.16
7	1150.99	1150.88	1142.76	1140.31	1167.90	1141.13	1140.10	1149.15	1150.11	1150.33	1150.31	1150.13
8	1150.84	1150.69	1142.19	1140.19	1167.69	1140.81	1140.18	1149.68	1150.19	1150.55	1150.37	1150.11
9	1150.55	1150.51	1141.66	1140.12	1164.29	1140.26	1139.91	1150.29	1150.29	1150.84	1150.45	1150.08
10	1150.54	1150.24	1140.91	1140.11	1159.78	1140.15	1140.28	1151.05	1150.28	1150.95	1150.50	1150.05
11	1150.44	1150.35	1140.25	1139.78	1155.43	1140.28	1140.57	1150.59	1150.21	1151.00	1150.54	1150.01
12	1150.11	1150.53	1140.33	1140.67	1149.95	1140.70	1140.40	1150.77	1150.23	1151.00	1150.54	1149.97
13	1149.78	1150.56	1140.35	1140.84	1144.72	1141.57	1140.16	1150.71	1150.29	1150.61	1150.52	1149.94
14	1150.06	1150.64	1140.25	1140.58	1140.92	1140.11	1141.15	1150.35	1150.63	1150.35	1150.50	1149.89
15	1150.30	1150.87	1140.11	1140.32	1140.75	1140.41	1140.62	1150.27	1150.85	1150.28	1150.46	1149.86
16	1150.45	1150.45	1140.03	1139.96	1140.95	1141.26	1140.11	1150.27	1150.87	1150.23	1150.43	1149.84
17	1150.52	1150.19	1139.94	1139.95	1140.52	1140.74	1140.77	1150.51	1151.05	1150.22	1150.40	1149.78
18	1150.54	1150.14	1140.39	1139.75	1140.55	1140.71	1141.71	1150.70	1150.36	1150.20	1150.38	1149.74
19	1150.60	1150.42	1140.49	1140.01	1140.69	1140.77	1140.96	1150.62	1150.17	1150.19	1150.33	1149.70
20	1150.66	1150.63	1140.57	1140.19	1140.18	1140.27	1140.36	1150.23	1150.30	1150.26	1150.28	1149.66
21	1150.60	1150.74	1140.57	1140.28	1140.09	1141.61	1140.06	1150.15	1150.36	1150.38	1150.26	1149.63
22	1150.47	1150.68	1140.75	1140.18	1140.23	1140.61	1140.11	1150.15	1150.34	1150.44	1150.22	1149.59
23	1150.36	1150.47	1141.15	1139.99	1140.25	1140.47	1140.24	1150.29	1150.32	1150.47	1150.17	1149.59
24	1150.98	1150.20	1141.18	1139.90	1140.16	1140.59	1140.16	1150.80	1150.24	1150.48	1150.17	1149.59
25	1151.30	1150.16	1139.91	1140.02	1139.90	1141.03	1140.20	1150.61	1150.16	1150.47	1150.21	1149.57
26	1151.03	1150.11	1140.75	1140.06	1139.88	1142.23	1140.28	1150.25	1150.37	1150.46	1150.24	1149.56
27	1151.22	1150.11	1140.88	1139.98	1140.49	1140.69	1141.63	1150.19	1150.57	1150.43	1150.25	1149.56
28	1153.04	1150.19	1140.24	1139.85	1140.80	1140.45	1142.69	1150.34	1150.81	1150.56	1150.26	1149.56
29	1150.71	1150.17	1140.33	1139.96	---	1140.35	1143.43	1150.60	1151.17	1150.47	1150.25	1149.55
30	1150.37	1149.92	1140.30	1140.11	---	1140.24	1144.47	1150.67	1150.73	1150.28	1150.24	1149.53
31	1149.86	---	1139.92	1140.27	---	1140.64	---	1150.31	---	1150.35	1150.23	---
MEAN	1150.62	1150.41	1141.67	1140.29	1147.32	1140.68	1140.85	1149.73	1150.42	1150.45	1150.31	1149.86
MAX	1153.04	1150.88	1149.08	1141.85	1167.90	1142.23	1144.47	1151.05	1151.17	1151.00	1150.54	1150.23
MIN	1149.78	1149.92	1139.91	1139.75	1139.88	1140.11	1139.91	1145.37	1150.04	1150.10	1150.16	1149.53
†	3,336	3,191	1,672	1,695	1,713	1,833	2,352	3,351	3,330	3,346	3,330	3,187
††	-0.2	-2.4	-24.7	+0.4	+0.3	+2.0	+8.7	+16.2	-0.4	+0.3	-0.3	-2.4

CAL YR 1981 MEAN 1146.89 MAX 1173.03 MIN 1139.61 †† +0.1
WTR YR 1982 MEAN 1146.87 MAX 1167.90 MIN 1139.75 †† -0.2

† Contents, in acre-feet, at end of month.
†† Change in contents, equivalent in cubic feet per second.

01500000 OULEOUT CREEK AT EAST SIDNEY, NY

LOCATION.--Lat 42°20'00", long 75°14'07", Delaware County, Hydrologic Unit 02050101, on right bank 0.2 mi (0.3 km) downstream from bridge on County Highway 44, 0.4 mi (0.6 km) downstream from East Sidney Dam, at East Sidney, and 3.5 mi (5.6 km) upstream from mouth (revised).

DRAINAGE AREA.--103 mi^2 (267 km^2).

PERIOD OF RECORD.--August 1940 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,086.23 ft (331.083 m) National Geodetic Vertical Datum of 1929. Prior to June 13, 1947, water-stage recorder at site 0.5 mi (0.8 km) upstream at datum 27.30 ft (8.321 m) higher.

REMARKS.--Records good. Since November 1949, flow regulated by East Sidney Lake (see station 01499500).

AVERAGE DISCHARGE.--42 years, 173 ft^3/s (4.899 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft^3/s (205 m^3/s) Dec. 30, 1942, gage height, 7.62 ft (2.323 m) site and datum then in use, from rating curve extended above 4,000 ft^3/s (113 m^3/s); minimum, 1.2 ft^3/s (0.034 m^3/s) Aug. 13, 14, 17, 1949, gage height, 0.32 ft (0.098 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 16,700 ft^3/s (473 m^3/s) in July 1935 was determined, by computation of flow over dam and from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,610 ft^3/s (45.6 m^3/s) Oct. 28, gage height, 4.44 ft (1.353 m); minimum, 5.5 ft^3/s (0.16 m^3/s) Nov. 14, Feb. 4-7, gage height, 0.82 ft (0.250 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	236	182	142	469	62	1010	29	130	144	73	8.7
2	70	275	279	147	443	47	608	30	130	90	42	8.7
3	153	253	328	85	456	47	589	30	130	69	29	9.2
4	155	182	223	389	5.6	47	962	30	130	69	29	9.2
5	124	157	164	779	5.5	47	548	17	130	69	20	9.2
6	88	179	162	431	5.5	48	455	9.0	115	69	11	9.2
7	230	237	161	343	82	69	308	8.9	101	53	11	9.2
8	295	237	159	245	649	80	330	9.2	78	33	11	9.2
9	255	236	157	207	1020	62	268	9.3	69	33	11	9.2
10	181	209	155	154	838	54	241	195	69	34	11	9.2
11	180	157	114	87	792	94	242	52	61	34	12	9.2
12	179	157	90	90	708	393	242	69	49	82	14	9.2
13	109	157	90	136	523	723	210	121	50	90	14	9.2
14	69	126	90	150	214	692	298	101	50	43	14	9.2
15	70	127	90	151	106	414	292	70	50	35	14	9.2
16	71	206	90	120	170	365	244	47	81	28	14	9.2
17	71	154	67	106	159	644	268	31	246	24	14	9.2
18	71	117	57	82	106	452	789	49	177	24	14	9.2
19	71	99	57	73	126	714	439	87	93	20	14	9.2
20	71	132	57	73	119	427	396	98	73	15	14	9.2
21	71	156	57	73	89	534	311	61	74	15	14	8.7
22	71	156	73	72	80	595	257	55	74	15	14	8.7
23	71	156	236	68	80	493	216	103	74	14	10	9.2
24	71	135	410	61	80	446	188	184	74	14	9.2	9.2
25	113	111	217	57	62	556	170	202	40	14	9.2	8.7
26	132	112	154	56	34	948	115	151	24	14	9.2	8.7
27	595	111	225	52	24	749	86	104	24	14	9.2	9.2
28	1200	112	178	47	68	398	88	90	25	85	9.2	9.2
29	966	112	152	40	---	395	48	90	202	112	9.2	9.2
30	559	154	152	40	---	340	29	167	420	34	9.2	9.2
31	349	---	106	40	---	517	---	130	---	57	9.2	---
TOTAL	6780	4948	4732	4596	7513.6	11452	10247	2429.4	3043	1446	497.6	273.0
MEAN	219	165	153	148	268	369	342	78.4	101	46.6	16.1	9.10
MAX	1200	275	410	779	1020	948	1010	202	420	144	73	9.2
MIN	69	99	57	40	5.5	47	29	8.9	24	14	9.2	8.7

CAL YR 1981 TOTAL 54010.5 MEAN 148 MAX 1750 MIN 8.2
WTR YR 1982 TOTAL 57957.6 MEAN 159 MAX 1200 MIN 5.5

01500500 SUSQUEHANNA RIVER AT UNADILLA, NY

LOCATION.--Lat 42°19'17", long 75°19'01", Otsego County, Hydrologic Unit 02050101, on right bank 25 ft (8 m) downstream from bridge on Bridge Street at Unadilla, 1.0 mi (1.6 km) upstream from Carrs Creek, and 1.6 mi (2.6 km) downstream from Ouleout Creek.

DRAINAGE AREA.--982 mi² (2,543 km²).

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 851: 1938(M). WSP 2103: 1966(M); Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 997.25 ft (303.961 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Slight regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--44 years, 1,578 ft³/s (44.69 m³/s), 21.82 in/yr (554 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft³/s (666 m³/s) Mar. 14, 1977, gage height, 14.64 ft (4.462 m); minimum, 39 ft³/s (1.10 m³/s) Oct. 17, 1964, gage height, 1.38 ft (0.421 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Mar. 18, 1936, reached a stage of 16.6 ft (5.060 m), from floodmarks, discharge, 31,300 ft³/s (886 m³/s), from publications of the Corps of Engineers, Baltimore District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,720 ft³/s (275 m³/s) Oct. 29 at 0130 hours, gage height, 9.55 ft (2.911 m), no peak above base of 11,000 ft³/s (312 m³/s); maximum gage height, 10.39 ft (3.167 m) Feb. 3 at 2330 hours (ice jam); minimum discharge, 87 ft³/s (2.46 m³/s) Sept. 30, gage height, 1.63 ft (0.497 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	811	3040	1100	1200	3200	660	8140	1440	1550	1680	397	120
2	954	2740	1510	1360	2900	640	7770	1330	1570	1250	331	132
3	1190	2360	1900	1000	3100	620	6400	1240	1690	1100	305	120
4	1240	2210	1640	1800	4000	560	8360	1090	1440	1030	299	99
5	1120	2000	1460	4720	5650	640	6910	976	1400	944	406	155
6	1020	2090	1390	3360	4120	740	5630	888	1690	858	254	118
7	1350	2610	1250	2880	3180	760	4470	812	2040	779	227	118
8	1780	2310	1200	2300	3200	720	4050	729	1780	813	202	125
9	1830	2180	1100	2030	3200	580	3690	767	1410	889	210	125
10	1460	2000	1000	1400	2800	620	3420	1230	1250	731	231	130
11	1310	1790	980	1200	2400	700	3220	1000	1170	640	221	123
12	1210	1690	940	1200	2000	1700	3050	812	1080	756	216	115
13	1080	1550	900	1200	1800	3000	2830	865	1010	698	199	113
14	962	1470	860	1300	1500	4260	3250	805	1310	576	198	111
15	909	1480	880	1300	1300	3530	3090	686	1250	439	181	113
16	874	1500	900	1200	1400	2940	2910	611	1090	717	181	143
17	843	1390	840	1100	1500	3610	3130	567	1930	428	176	120
18	787	1430	800	1100	1300	3660	5670	552	2390	316	176	120
19	779	1190	740	1000	1200	4320	5330	567	1590	383	165	111
20	618	1360	680	960	1200	3590	4180	617	1490	338	170	97
21	717	1540	720	900	1100	4200	3600	674	1300	433	165	101
22	740	1570	780	920	1000	4570	3310	628	1170	266	147	118
23	727	1400	1100	920	960	4350	2900	760	1210	208	140	120
24	1000	1200	2340	880	900	4200	2600	1500	1140	189	143	135
25	960	1200	2020	840	780	4620	2330	1800	969	187	158	143
26	853	1300	1400	800	640	6900	2100	1470	817	208	173	101
27	2350	1140	1200	780	680	6930	2140	1020	711	213	158	178
28	7420	1450	1100	740	740	4920	2020	914	742	496	147	113
29	8190	1300	1000	720	---	4150	1760	957	1320	823	132	93
30	5300	1200	900	800	---	3870	1560	1200	2830	491	132	89
31	3800	---	800	920	---	4550	---	1190	---	406	127	---
TOTAL	54184	51690	35430	42830	57750	91110	119820	29697	42339	19285	6367	3599
MEAN	1748	1723	1143	1382	2063	2939	3994	958	1411	622	205	120
MAX	8190	3040	2340	4720	5650	6930	8360	1800	2830	1680	406	178
MIN	618	1140	680	720	640	560	1560	552	711	187	127	89
CFSM	1.78	1.76	1.16	1.41	2.10	2.99	4.07	.98	1.44	.63	.21	.12
IN.	2.05	1.96	1.34	1.62	2.19	3.45	4.54	1.12	1.60	.73	.24	.14

CAL YR 1981 TOTAL 451377 MEAN 1237 MAX 8200 MIN 91 CFSM 1.26 IN 17.10
WTR YR 1982 TOTAL 554101 MEAN 1518 MAX 8360 MIN 89 CFSM 1.55 IN 20.99

01502000 BUTTERNUT CREEK AT MORRIS, NY

LOCATION.--Lat 42°32'43", long 75°14'22", Otsego County, Hydrologic Unit 02050101, on right bank 15 ft (5 m) upstream from bridge on State Highway 23 at Morris, and 0.2 mi (0.3 km) upstream from Calhoun Creek.

DRAINAGE AREA.--59.7 mi² (155 km²).

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 921: 1939. WSP 2103: Drainage area. WRD NY 1974: 1973(P).

GAGE.--Water-stage recorder. Datum of gage 1096.21 ft (334.125 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--44 years, 100 ft³/s (2.832 m³/s), 22.75 in/yr (578 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,980 ft³/s (169 m³/s) Oct. 17, 1977, gage height, 9.44 ft (2.877 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Sept. 24, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,940 ft³/s (54.9 m³/s) Oct. 28 at 1130 hours, gage height, 6.55 ft (1.996 m), no other peak above base of 1,400 ft³/s (39.6 m³/s); minimum, 2.6 ft³/s (0.07 m³/s) Sept. 18, 19, 21, gage height, 1.33 ft (0.405 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	183	74	80	110	49	669	81	79	61	18	7.8
2	95	160	94	86	120	50	400	77	112	51	18	7.3
3	100	143	103	66	180	45	460	73	83	47	18	7.3
4	98	130	90	200	440	42	660	70	86	44	16	7.3
5	85	120	89	361	270	44	320	66	79	41	16	6.8
6	90	165	85	209	220	45	280	62	99	37	15	6.4
7	132	163	79	182	160	44	250	61	82	35	14	6.0
8	181	141	85	140	150	44	240	59	71	59	14	6.0
9	147	143	82	130	130	42	230	73	64	43	13	6.0
10	125	128	75	110	110	40	230	105	57	37	17	5.1
11	114	122	72	96	100	52	220	72	52	32	16	3.6
12	101	114	68	86	94	93	210	65	52	31	14	3.2
13	93	105	64	90	90	143	230	68	52	28	12	4.7
14	87	102	62	86	84	230	260	61	64	25	12	5.1
15	81	103	62	82	86	197	230	57	51	25	11	5.5
16	77	105	60	78	90	176	230	54	49	24	11	4.4
17	73	99	56	76	88	260	280	52	178	23	10	5.5
18	71	93	52	72	80	278	500	49	102	21	9.8	4.0
19	79	94	48	68	78	310	350	47	76	23	9.3	4.4
20	70	102	47	64	76	293	250	64	71	22	8.8	4.0
21	63	114	48	62	74	350	200	56	69	21	9.3	4.0
22	60	106	50	60	70	373	150	48	70	19	8.3	4.4
23	75	99	102	62	66	334	131	76	76	18	7.8	6.0
24	105	94	132	58	62	351	118	117	60	17	7.3	9.3
25	78	88	100	54	56	430	108	93	59	16	9.3	6.8
26	81	84	86	50	54	638	105	75	56	16	10	3.6
27	365	99	84	49	52	370	124	67	49	14	8.8	5.1
28	1160	102	84	48	50	260	102	65	50	26	7.8	5.1
29	426	92	82	46	---	230	92	72	79	26	7.8	6.0
30	279	82	76	47	---	244	86	69	97	21	7.3	6.4
31	215	---	66	50	---	431	---	78	---	19	6.8	---
TOTAL	4879	3475	2357	2948	3240	6488	7715	2132	2224	922	363.4	167.1
MEAN	157	116	76.0	95.1	116	209	257	68.8	74.1	29.7	11.7	5.57
MAX	1160	183	132	361	440	638	669	117	178	61	18	9.3
MIN	60	82	47	46	50	40	86	47	49	14	6.8	3.2
CFSM	2.63	1.94	1.27	1.59	1.94	3.50	4.31	1.15	1.24	.50	.20	.09
IN.	3.04	2.17	1.47	1.84	2.02	4.04	4.81	1.33	1.39	.57	.23	.10

CAL YR 1981 TOTAL 31710.1 MEAN 86.9 MAX 1160 MIN 6.1 CFSM 1.46 IN 19.76
WTR YR 1982 TOTAL 36910.5 MEAN 101 MAX 1160 MIN 3.2 CFSM 1.69 IN 23.00

01502500 UNADILLA RIVER AT ROCKDALE, NY

LOCATION.--Lat 42°22'40", long 75°24'23", Chenango County, Hydrologic Unit 02050101, on right bank 400 ft (122 m) downstream from Chenango-Otsego County highway bridge at Rockdale, and 0.7 mi (1.1 km) downstream from Kent Brook.

DRAINAGE AREA.--520 mi^2 (1,347 km^2).

PERIOD OF RECORD.--November 1929 to September 1933, January 1937 to current year.

REVISED RECORDS.--WRD NY 1974: 1973 (P).

GAGE.--Water-stage recorder. Datum of gage is 992.11 ft (302.395 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 30, 1933, nonrecording gage at bridge 400 ft (122 m) upstream at datum 0.73 ft (0.223 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--48 years (water years 1931-33, 1938-82), 844 ft^3/s (23.90 m^3/s), 22.04 in/yr (560 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft^3/s (493 m^3/s) Dec. 31, 1942, gage height, 12.98 ft (3.956 m); minimum daily, 27 ft^3/s (0.76 m^3/s) Sept. 20-27, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,330 ft^3/s (151 m^3/s) Apr. 2 at 0630 hours, gage height, 7.96 ft (2.426 m), no peak above base of 5,700 ft^3/s (161 m^3/s); minimum, 54 ft^3/s (1.529 m^3/s) Sept. 13-15, 20, 22; minimum gage height, 3.54 ft (1.079 m) Sept. 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	573	1810	680	660	1200	420	4870	708	1110	2840	155	76
2	708	1530	780	740	1100	390	5110	632	1480	1660	145	82
3	870	1330	1010	700	1500	380	3840	573	1760	1090	152	82
4	1020	1150	919	1300	3200	370	4510	522	1330	879	152	80
5	841	1020	805	3000	3000	390	3700	475	1070	743	145	76
6	752	1180	720	2000	2300	400	2780	438	1180	600	130	71
7	1210	1580	580	1600	1900	380	2140	416	1300	506	122	71
8	1830	1310	560	1300	1600	360	1980	403	990	779	117	65
9	2100	1270	540	1100	1300	350	1900	438	787	980	117	64
10	1490	1150	520	920	1100	350	1700	734	643	582	128	62
11	1150	1020	500	840	940	370	1700	700	539	430	128	60
12	970	939	490	820	860	743	1600	475	530	389	117	59
13	841	841	470	800	780	1440	1570	452	498	346	109	56
14	752	779	480	880	720	2560	2010	423	582	300	107	54
15	677	761	480	860	680	2410	1860	364	539	269	102	57
16	600	796	460	800	700	2060	1740	328	452	250	97	71
17	556	851	420	720	740	2330	1990	305	1550	240	97	62
18	522	770	380	680	680	2660	3400	295	1790	231	93	62
19	556	761	350	640	640	3000	3080	269	990	250	90	60
20	556	841	350	600	620	2570	2220	334	796	284	88	56
21	475	1030	360	560	600	3070	1940	482	677	269	86	57
22	416	1020	390	560	580	3340	1750	396	600	227	84	56
23	445	929	720	580	540	3100	1470	475	752	198	82	72
24	879	820	1560	540	520	3010	1280	1070	743	179	82	90
25	787	760	1250	500	470	3430	1110	1310	522	162	95	99
26	643	720	970	480	420	4550	1010	879	445	152	95	93
27	1810	779	840	460	430	4450	1200	688	416	142	90	82
28	4330	950	740	450	450	2920	1110	564	438	236	84	78
29	4610	889	660	430	---	2390	899	632	700	240	76	80
30	3080	780	600	450	---	2270	787	743	2880	194	72	80
31	2230	---	560	470	---	2810	---	841	---	175	72	---
TOTAL	38279	30366	20144	26440	29570	59273	66256	17364	28089	15822	3309	2113
MEAN	1235	1012	650	853	1056	1912	2209	560	936	510	107	70.4
MAX	4610	1810	1560	3000	3200	4550	5110	1310	2880	2840	155	99
MIN	416	720	350	430	420	350	787	269	416	142	72	54
CFSM	2.38	1.95	1.25	1.64	2.03	3.68	4.25	1.08	1.80	.98	.21	.14
IN.	2.74	2.17	1.44	1.89	2.12	4.24	4.74	1.24	2.01	1.13	.24	.15

CAL YR 1981 TOTAL 283574 MEAN 777 MAX 7820 MIN 65 CFSM 1.49 IN 20.29
WTR YR 1982 TOTAL 337025 MEAN 923 MAX 5110 MIN 54 CFSM 1.78 IN 24.11

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY

LOCATION.--Lat 42°02'07", long 75°48'12", Broome County, Hydrologic Unit 02050101, on left bank at abutment of former highway bridge, 500 ft (152 m) upstream from bridge on County Highway 304 at Conklin, 0.7 mi (1.1 km) downstream from Little Snake Creek, and 3.5 mi (5.6 km) downstream from Pennsylvania-New York State line.

DRAINAGE AREA.--2,232 mi² (5,781 km²).

PERIOD OF RECORD.--November 1912 to current year.

REVISED RECORDS.--WSP 1672: 1918(M, P). WSP 2103: Drainage area. WDR NY-81-3: 1918 (M, P).

GAGE.--Water-stage recorder. Datum of gage is 841.04 ft (256.349 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1914, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Minor regulation by upstream lakes and reservoirs.

AVERAGE DISCHARGE.--69 years (water years 1914-82), 3,609 ft³/s (102.2 m³/s), 21.96 in/yr (558 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft³/s (1,740 m³/s) Mar. 18, 1936, gage height, 20.14 ft (6.139 m); maximum gage height, 20.83 ft (6.349 m) Mar. 22, 1948; minimum discharge, 85 ft³/s (2.41 m³/s) Oct. 14, 1964, gage height, 1.30 ft (0.396 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,700 ft³/s (501 m³/s) Mar. 27 at 0700 hours, gage height, 10.31 ft (3.142 m), no peak above base of 18,000 ft³/s (510 m³/s); maximim gage height, 13.83 ft (4.215 m) Feb. 5 at 0200 hours (ice jam); minimum discharge, 221 ft³/s (6.26 m³/s) Sept. 22, 23, gage height, 1.78 ft (0.543 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	6580	2500	2400	7000	2000	14700	3110	4760	6950	846	303
2	1860	5540	2700	3100	6200	1900	17200	2870	5080	5200	872	303
3	2000	4960	3470	3500	7000	1800	15900	2650	4750	3680	769	299
4	2340	4350	3910	3100	10000	1700	16900	2480	4960	2930	689	303
5	2570	3980	3490	8360	13000	1800	16200	2240	4500	2550	658	286
6	2360	3920	3140	9510	10000	1900	12800	2060	4770	2240	658	265
7	2380	4530	2890	6990	8000	1700	9800	1900	4920	1970	666	282
8	3210	4970	2700	5400	9000	1500	7800	1800	4730	1780	537	286
9	4180	4550	2800	4000	10000	1400	7400	1760	3930	1840	504	265
10	4230	4310	2500	3000	9400	1500	6890	1830	3120	2150	485	265
11	3350	3940	2300	2200	6600	1700	6760	2430	2730	1710	504	265
12	2850	3560	2100	2100	6000	3000	6440	2310	2460	1720	504	269
13	2530	3300	2000	2400	5200	8000	6160	1860	2510	1700	472	257
14	2260	3030	2000	2700	4700	12000	6570	1780	2780	1500	447	245
15	2030	2890	2100	2900	4200	11000	6940	1710	2730	1500	417	249
16	1900	3220	2000	3000	4300	8910	6370	1500	2580	1200	405	253
17	1790	3430	1900	2900	4400	7680	6270	1360	3030	1170	394	249
18	1700	3250	1800	2800	4000	9880	10500	1250	5400	1040	388	261
19	1640	3150	1600	2600	3500	11000	12500	1180	4920	864	388	265
20	1610	2930	1500	2500	3300	10500	9930	1180	3540	992	371	249
21	1520	3290	1400	2300	3000	11000	7790	1260	3050	1080	365	245
22	1430	3530	1600	2200	2700	12200	6890	1410	2690	936	365	229
23	1470	3440	2900	2200	2700	11800	6120	1480	2560	837	346	233
24	1730	3100	5250	2100	2500	11100	5410	1950	2590	666	326	265
25	2260	2700	5740	2000	2200	11500	4860	3330	2430	571	326	261
26	2210	2600	4500	1900	2100	15300	4430	3610	2050	524	346	282
27	3080	2600	3800	1900	2100	17300	4370	2860	1770	491	382	322
28	11700	2590	3470	1800	2000	13500	4440	2210	1640	550	376	317
29	16300	2960	3200	1900	---	9460	4030	3150	3210	769	346	341
30	13400	2780	2900	2000	---	8180	3500	2980	6010	1350	312	308
31	8870	---	2700	3000	---	8600	---	5750	---	1090	290	---
TOTAL	112710	109980	86860	98760	155100	230810	255870	69250	106200	53550	14754	8222
MEAN	3636	3666	2802	3186	5539	7445	8529	2234	3540	1727	476	274
MAX	16300	6580	5740	9510	13000	17300	17200	5750	6010	6950	872	341
MIN	1430	2590	1400	1800	2000	1400	3500	1180	1640	491	290	229
CFSM	1.63	1.64	1.26	1.43	2.48	3.34	3.82	1.00	1.59	.77	.21	.12
IN.	1.88	1.83	1.45	1.65	2.58	3.85	4.26	1.15	1.77	.89	.25	.14

CAL YR 1981 TOTAL 1068557 MEAN 2928 MAX 24300 MIN 242 CFSM 1.31 IN 17.81
WTR YR 1982 TOTAL 1302066 MEAN 3567 MAX 17300 MIN 229 CFSM 1.60 IN 21.70

01505000 CHENANGO RIVER AT SHERBURNE, NY

LOCATION.--Lat 42°40'43", long 75°30'39", Chenango County, Hydrologic Unit 02050102, on right bank 20 ft (6 m) downstream from bridge on State Highway 80, 0.5 mi (0.8 km) west of Sherburne, and 0.5 mi (0.8 km) downstream from Handsome Brook.

DRAINAGE AREA.--263 mi² (681 km²).

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 851: 1938(M). WSP 1502: 1955. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,037.16 ft (316.126 m) National Geodetic Vertical Datum of 1929. July 22 to Dec. 9, 1953, nonrecording gage or reference point and Dec. 10, 1953 to Jan. 26, 1955, water-stage recorder at temporary site 1.5 mi (2.4 km) downstream, at datum approximately 11.9 ft (3.63 m) lower, during period of construction of highway bridge.

REMARKS.--Records fair except those for winter periods, which are poor. Flow from 82 mi² of drainage area formerly may have been diverted into Mohawk River basin through abandoned Chenango Canal; no diversion from this cause known during period of record.

AVERAGE DISCHARGE.--44 years, 407 ft³/s (11.53 m³/s), 21.02 in/yr (534 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (295 m³/s) Mar. 6, 1979, gage height, 9.94 ft (3.030 m); maximum gage height, 9.99 ft (3.045 m) Dec. 30, 1942 (ice jam); minimum discharge, 12 ft³/s (0.34 m³/s) Sept. 25, 1964; minimum gage height, 1.52 ft (0.436 m) Sept. 19, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936, reached a stage of 10.6 ft (3.23 m), from records of National Weather Service.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,100 ft³/s (87.8 m³/s) June 29 at 0200 hours, gage height, 7.96 ft (2.426 m), no peak above base of 3,500 ft³/s (99.1 m³/s); minimum discharge, 36 ft³/s (1.02 m³/s) Sept. 14; minimum gage height, 1.96 ft (0.597 m) Sept. 19-21, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	1010	380	300	300	110	2790	258	639	1120	88	48
2	363	848	441	270	500	120	2090	237	1630	909	90	50
3	498	724	488	290	600	120	1770	221	1030	688	100	53
4	698	635	423	649	900	110	2050	199	869	526	98	50
5	474	568	388	1210	1200	120	1550	175	739	380	90	48
6	478	602	349	800	1000	130	1320	175	1080	295	90	45
7	933	630	299	600	800	110	1080	175	869	224	86	42
8	1400	573	341	520	700	110	960	150	668	582	86	42
9	1380	611	315	480	600	100	880	178	526	367	90	40
10	1060	540	291	450	500	110	840	206	401	254	95	42
11	890	488	299	420	420	118	820	175	345	178	98	43
12	750	450	291	400	370	244	818	147	287	147	90	42
13	620	388	270	380	320	607	864	153	237	147	86	40
14	544	349	250	370	290	1110	1030	139	218	139	84	37
15	469	345	240	380	260	943	948	126	178	133	74	39
16	423	401	220	380	240	848	958	118	178	128	74	43
17	376	432	210	360	260	1020	1190	111	649	118	76	45
18	311	401	200	320	240	1220	1950	107	410	121	72	41
19	340	445	180	300	220	1430	1350	104	280	156	68	40
20	299	563	170	280	210	1270	1120	165	231	147	70	40
21	254	644	170	270	190	1590	1020	156	175	133	70	40
22	228	597	180	270	180	1740	874	118	165	109	68	40
23	299	554	488	260	170	1530	729	195	234	104	66	47
24	418	517	654	260	160	1600	602	582	165	102	64	74
25	303	459	493	250	150	1920	521	380	133	100	63	64
26	307	427	380	240	150	2470	493	276	118	107	68	53
27	1090	508	350	240	140	2030	563	224	116	102	63	57
28	1880	549	310	230	120	1480	427	178	109	104	61	69
29	1800	483	280	230	---	1270	345	214	1290	123	56	59
30	1410	432	260	230	---	1240	291	221	1850	111	53	53
31	1190	---	250	240	---	1840	---	573	---	100	53	---
TOTAL	21796	16173	9860	11879	11190	28660	32243	6436	15819	7954	2390	1426
MEAN	703	539	318	383	400	925	1075	208	527	257	77.1	47.5
MAX	1880	1010	654	1210	1200	2470	2790	582	1850	1120	100	74
MIN	228	345	170	230	120	100	291	104	109	100	53	37
CFSM	2.67	2.05	1.21	1.46	1.52	3.52	4.09	.79	2.00	.98	.29	.18
IN.	3.08	2.29	1.39	1.68	1.58	4.05	4.56	.91	2.24	1.13	.34	.20

CAL YR 1981 TOTAL 143924 MEAN 394 MAX 3720 MIN 42 CFSM 1.50 IN 20.36
WTR YR 1982 TOTAL 165826 MEAN 454 MAX 2790 MIN 37 CFSM 1.73 IN 23.46

01508803 WEST BRANCH TIOUGHNIOGA RIVER AT HOMER, N.Y.

LOCATION.--Lat 42°38'18", long 76°10'36", Cortland County, Hydrologic Unit 02050102, on left bank at downstream side of bridge on Wall Street at Homer and 3.4 mi (5.5 km) upstream from confluence with East Branch.

DRAINAGE AREA.--71.5 mi² (185 km²).

PERIOD OF RECORD.--November 1966 to September 1968, October 1972 to current year.

REVISED RECORDS.--WRD NY 1974: 1973 (P).

GAGE.--Water-stage recorder. Datum of gage is 1,114.81 ft (339.794 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, water-stage recorder at bridge on Water Street 500 ft (152 m) upstream at same datum.

REMARKS.--Records fair. Slight diversion, maximum daily 0.3 ft³/s (0.008 m³/s), from Gate House Pond 13 mi (21 km) upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Solvay Process Co.

AVERAGE DISCHARGE.--11 years (water years 1968, 1973-82), 133 ft³/s (3.767 m³/s), 25.26 in/yr (642 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,710 ft³/s (76.7 m³/s) Oct. 28, 1981, gage height, 8.74 ft (2.664 m); minimum discharge, 9.6 ft ³/s (0.27 m³/s) Nov. 22, 1966; minimum gage height, 1.08 ft (0.329 m) Oct. 1, 2, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft³/s (18.4 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft³/s)	(m³/s)	Gage height (ft)	(m)
Oct. 28	1000	*2,710	76.7	*8.74	2.664	Apr. 1	0230	837	23.7	5.19	1.582

Minimum discharge, 15 ft³/s (0.42 m³/s) Sept. 19-22, gage height, 1.10 ft (0.325 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	456	170	120	109	59	657	94	127	131	37	25
2	150	388	181	120	109	61	454	88	153	108	37	24
3	227	333	178	110	122	58	422	84	123	97	39	24
4	202	292	164	140	188	53	485	80	120	91	38	23
5	159	264	158	270	147	57	386	76	115	82	37	22
6	200	273	152	230	135	55	352	74	246	79	37	22
7	320	280	146	190	123	57	297	72	193	74	36	22
8	527	258	147	160	112	54	276	78	155	96	36	21
9	447	255	144	150	107	52	257	82	136	82	39	20
10	360	233	137	140	100	52	246	96	120	72	42	25
11	293	215	133	120	96	54	245	82	110	66	36	24
12	247	198	128	130	90	73	236	76	102	60	32	24
13	214	182	123	140	87	137	248	72	100	54	32	20
14	192	174	120	120	84	232	268	68	95	50	33	19
15	181	168	117	120	82	219	246	66	88	52	28	22
16	174	245	114	120	86	210	248	64	90	49	26	19
17	161	252	109	100	89	246	289	60	146	46	25	18
18	156	250	108	110	85	271	447	58	115	48	26	18
19	167	257	99	98	83	301	324	58	100	52	24	16
20	163	342	99	94	81	287	280	64	91	50	26	15
21	146	329	97	88	80	344	240	74	86	47	26	15
22	147	293	97	88	78	364	200	66	86	45	26	15
23	176	266	171	86	75	332	180	100	80	43	29	36
24	159	245	182	84	72	360	160	140	75	42	23	41
25	135	225	150	78	66	421	140	105	70	40	24	33
26	133	207	140	76	66	482	130	95	69	39	25	32
27	560	213	140	78	64	430	140	87	70	38	24	55
28	1990	200	130	80	62	348	130	88	75	38	23	52
29	1110	189	130	72	---	313	110	100	190	41	21	42
30	741	176	120	67	---	296	100	87	198	40	19	35
31	557	---	110	70	---	402	---	146	---	38	23	---
TOTAL	10528	7658	4194	3649	2678	6680	8193	2580	3524	1890	929	779
MEAN	340	255	135	118	95.6	215	273	83.2	117	61.0	30.0	26.0
MAX	1990	456	182	270	188	482	657	146	246	131	42	55
MIN	133	168	97	67	62	52	100	58	69	38	19	15
CFSM	4.76	3.57	1.89	1.65	1.34	3.01	3.82	1.16	1.64	.85	.42	.36
IN.	5.48	3.98	2.18	1.90	1.39	3.48	4.26	1.34	1.83	.98	.48	.41

CAL YR 1981 TOTAL 50281 MEAN 138 MAX 1990 MIN 16 CFSM 1.93 IN 26.16
WTR YR 1982 TOTAL 53282 MEAN 146 MAX 1990 MIN 15 CFSM 2.04 IN 27.72

Note.- No gage-height record Apr. 20 to May 23 and doubtful gage-height record July 8 to Aug. 11.

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

LOCATION.--Lat 42°36'10", long 76°09'35", Cortland County, Hydrologic Unit 02050102, on right bank at east end of Elm Street at Cortland, 0.4 mi (0.6 km) downstream from confluence of East and West Branches. Water-quality sampling site at Cortland Sewage Treatment Plant, 0.4 mi (0.6 km) downstream from discharge station.

DRAINAGE AREA.--292 mi^2 (756 km^2), including 14.0 mi^2 (36.3 km^2), the flow from which may be diverted into De Ruyter Reservoir in Oswego River basin.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 1,084.92 ft (330.683 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1939, water-stage recorder at datum 4.00 ft (1.219 m) higher; Oct. 1, 1939 to Sept. 30, 1963, water-stage recorder at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation at low and medium flow caused by powerplants in mills on West Branch. Slight diversion from East Branch for operation of Erie (Barge) Canal. Slight diversion, maximum daily, 0.3 ft^3/s (0.008 m^3/s), from Gate House Pond on West Branch 17 mi (27 km) upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Solvay Process Co.

AVERAGE DISCHARGE.--44 years (water years 1939-82), 500 ft^3/s (14.16 m^3/s), 23.25 in/yr (591 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s (368 m^3/s) Mar. 5, 1964, gage height, 12.49 ft (3.807 m); maximum gage height, 12.50 ft (3.810 m) Oct. 28, 1981; minimum discharge, 9.8 ft^3/s (0.28 m^3/s) Sept. 20, 1939, Sept. 29, 1959; minimum daily, 17 ft^3/s (0.48 m^3/s) Sept. 26, 27, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft^3/s (317 m^3/s) Oct. 28 at 0900 hours, gage height, 12.50 ft (3.810 m), no other peak above base of 4,400 ft^3/s (125 m^3/s); minimum discharge, 52 ft^3/s (1.47 m^3/s) Sept. 14; minimum gage height, 2.66 ft (0.811 m) Sept. 14, 20-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	483	1500	536	430	330	230	3780	397	1130	474	120	71
2	555	1220	577	420	500	230	2700	377	1180	360	117	71
3	730	1020	628	370	580	210	1910	354	895	315	132	66
4	836	876	551	520	1030	200	2390	335	719	293	126	64
5	643	778	521	1070	1020	220	1770	312	618	267	114	64
6	733	839	488	793	820	210	1430	303	917	245	105	62
7	1400	930	465	680	660	210	1080	298	834	228	102	62
8	2200	857	469	540	600	200	960	295	620	381	102	60
9	2330	892	461	520	520	200	840	336	519	325	123	60
10	1650	813	427	440	460	190	820	404	444	252	135	58
11	1170	732	422	400	440	200	860	331	392	225	123	58
12	918	680	413	390	400	325	800	298	358	214	108	56
13	765	609	399	400	380	631	861	292	337	196	102	56
14	663	575	386	410	370	1280	1110	279	318	178	99	54
15	596	559	377	390	370	1130	1000	262	292	185	93	56
16	548	805	370	370	390	987	1030	244	291	167	88	60
17	508	967	340	320	408	1030	1450	239	630	161	85	62
18	484	897	330	320	368	1200	2490	231	531	167	83	58
19	530	926	320	300	350	1490	1820	226	377	178	80	56
20	505	1210	320	300	329	1270	1230	270	332	178	80	56
21	443	1270	310	290	308	1620	1100	307	307	164	80	56
22	416	1090	310	280	296	1770	928	252	296	150	80	56
23	474	947	580	270	283	1510	782	309	282	144	83	75
24	539	843	858	260	270	1610	702	566	263	138	75	114
25	460	751	708	250	260	1990	617	482	239	135	73	96
26	437	673	569	260	240	2580	564	385	227	123	71	80
27	1930	696	529	270	240	2210	578	332	232	117	71	105
28	9740	703	499	260	230	1460	522	316	246	132	69	123
29	6630	620	475	240	---	1230	466	342	483	138	66	102
30	3280	567	430	240	---	1190	426	338	883	132	66	90
31	2010	---	380	250	---	1830	---	820	---	126	69	---
TOTAL	44606	25845	14448	12253	12452	30643	37016	10532	15192	6488	2920	2107
MEAN	1439	862	466	395	445	988	1234	340	506	209	94.2	70.2
MAX	9740	1500	858	1070	1030	2580	3780	820	1180	474	135	123
MIN	416	559	310	240	230	190	426	226	227	117	66	54
CFSM	4.93	2.95	1.60	1.35	1.52	3.38	4.23	1.16	1.73	.72	.32	.24
IN.	5.68	3.29	1.84	1.56	1.59	3.90	4.72	1.34	1.94	.83	.37	.27

CAL YR 1981 TOTAL 202114 MEAN 554 MAX 9740 MIN 62 CFSM 1.90 IN 25.75
WTR YR 1982 TOTAL 214502 MEAN 588 MAX 9740 MIN 54 CFSM 2.01 IN 27.33

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957 to current year.
CHEMICAL DATA: 1957 (e), 1970, 1972 (a).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1956 to September 1957, once-daily measurements, unpublished.
pH: October 1956 to September 1957, once-daily measurements, unpublished.
WATER TEMPERATURES: October 1956 to current year.

REMARKS.--Daily water-temperature measurements made at 0900 hours. Measurements are reported to half degrees Celsius.

COOPERATION.--Water-temperature records furnished by the city of Cortland.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 23.5°C July 22, 1957; minimum daily (except water year 1960), freezing point on many days during winter periods in water years 1957, 1959, 1962, 1967-82.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 19.0°C July 18; minimum daily, freezing point on several days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

(ONCE DAILY AT 0900)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.0	7.0	3.0	3.5	3.0	5.0	5.0	10.0	16.0	14.0	16.5	13.5
2	9.5	7.0	3.0	1.5	.0	4.0	3.0	11.0	15.0	15.0	16.0	12.5
3	11.0	7.0	3.0	2.0	3.0	3.0	4.0	11.0	14.5	15.0	14.5	12.5
4	9.0	6.5	3.5	3.0	1.0	5.0	3.0	12.0	14.0	14.0	15.0	14.5
5	12.5	6.5	3.0	.0	.5	4.0	1.0	12.0	13.5	16.0	16.0	14.0
6	12.5	8.0	.5	1.0	1.0	3.5	1.0	12.0	13.5	16.5	14.0	14.0
7	13.0	6.0	3.0	2.0	1.0	4.0	1.0	13.0	13.0	17.0	12.0	14.0
8	10.5	4.0	3.0	1.0	2.0	4.0	1.0	12.0	15.0	18.0	13.0	14.0
9	10.5	5.0	.0	1.0	2.0	2.0	1.5	10.0	14.5	18.0	16.5	15.0
10	8.5	5.0	1.0	.0	1.0	6.0	3.0	11.0	14.5	18.0	16.0	15.0
11	9.5	6.0	1.0	.0	1.5	7.0	1.5	11.0	15.0	17.0	15.0	14.5
12	8.5	4.0	1.0	.0	1.5	7.0	3.0	11.5	13.5	17.5	14.0	14.5
13	9.0	4.0	1.0	.5	2.0	3.0	2.0	13.0	13.0	15.5	14.0	15.5
14	7.0	4.0	3.0	.0	2.0	4.0	4.0	13.0	13.0	15.0	14.5	17.0
15	8.0	5.5	5.0	.0	3.0	3.0	5.0	13.0	14.0	16.0	15.0	17.0
16	9.0	5.0	4.0	.0	4.5	2.5	7.0	13.0	15.0	17.5	15.0	15.5
17	6.5	5.0	3.0	.5	2.5	3.0	10.0	13.5	15.0	18.5	15.0	15.0
18	7.0	5.0	4.0	.0	4.0	6.5	8.0	13.5	15.0	19.0	13.5	12.0
19	6.0	5.0	1.5	.0	4.5	6.0	7.0	14.0	16.0	18.5	14.0	13.5
20	5.0	5.0	1.0	5.5	4.0	3.0	12.0	15.0	14.5	18.0	14.0	12.0
21	8.0	5.0	.0	1.0	4.0	2.5	10.0	14.5	14.5	16.0	13.5	13.5
22	10.0	4.0	2.0	2.0	4.0	1.5	---	14.0	14.0	16.0	13.5	14.5
23	10.0	3.0	3.0	1.0	4.5	2.0	11.0	11.0	13.5	16.5	13.5	14.0
24	6.0	---	2.0	2.0	4.0	2.0	10.0	11.0	14.0	15.0	14.0	12.0
25	6.0	3.0	2.0	1.0	2.0	2.0	10.0	12.5	13.5	16.0	15.0	15.0
26	6.5	3.0	1.5	2.0	4.0	1.5	11.0	14.0	14.0	17.0	13.5	14.5
27	9.0	3.0	2.0	1.5	4.5	.0	11.5	15.0	14.0	17.5	14.0	14.5
28	8.5	4.5	3.0	1.0	4.5	1.0	9.0	14.0	15.0	16.0	13.5	14.0
29	8.5	3.5	3.0	3.0	---	2.5	9.0	14.0	14.5	17.0	13.0	14.5
30	8.5	3.0	3.0	3.0	---	3.5	9.5	15.5	17.5	17.0	13.0	14.5
31	6.0	---	2.5	3.5	---	5.0	---	16.0	---	16.5	13.5	---
MEAN	8.5	5.0	2.5	1.5	2.5	3.5	6.0	13.0	14.5	16.5	14.5	14.0
MAX	13.0	8.0	5.0	5.5	4.5	7.0	12.0	16.0	17.5	19.0	16.5	17.0
MIN	5.0	3.0	.0	.0	.0	.0	1.0	10.0	13.0	14.0	12.0	12.0

CAL YR 1981 MEAN 9.5 MAX 18.0 MIN .0
WTR YR 1982 MEAN 8.5 MAX 19.0 MIN .0

01510000 OTSELIC RIVER AT CINCINNATUS, NY

LOCATION.--Lat 42°32'28", long 75°54'00", Cortland County, Hydrologic Unit 02050102, on right bank 150 ft (46 m) upstream from Mead Brook, and 300 ft (91 m) downstream from bridge on County Highway 159 at Cincinnatus.

INAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--June 1938 to September 1964, October 1969 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,031.67 ft (314.328 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--39 years (water years 1939-64, 1970-82), 271 ft³/s (7.675 m³/s), 25.04 in/yr (636 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,390 ft³/s (238 m³/s) Dec. 30, 1942; maximum gage height, 10.68 ft (3.255 m) Apr. 4, 1950; minimum discharge, 3.8 ft³/s (0.11 m³/s) Sept. 25, 1939; minimum gage height, 0.24 ft (0.073 m) Sept. 2, 1979 (result of channel clearance).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 4	1245	ice jam		*9.42	2.871	Apr. 1	0645	*2,440	69.1	6.08	1.853

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Sept. 13, 14, 21, 22; minimum gage height, 0.47 ft (0.143 m) Sept. 14, 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	428	224	210	200	98	2020	218	1030	345	41	22
2	309	374	265	200	230	96	1100	205	1210	268	41	23
3	394	329	285	190	300	94	990	190	716	227	54	22
4	469	295	250	300	470	90	1290	174	569	203	44	20
5	350	270	235	500	450	96	803	159	445	174	41	20
6	370	298	220	400	350	94	647	149	547	153	37	19
7	746	333	212	330	290	92	520	142	458	139	35	18
8	1240	312	218	300	250	90	470	135	350	205	35	17
9	1130	333	210	270	220	88	430	155	286	155	38	17
10	719	294	195	230	200	84	400	163	241	125	42	16
11	524	273	193	210	190	90	410	136	225	109	38	16
12	429	261	186	200	180	180	390	124	199	101	34	15
13	365	238	177	200	170	320	432	127	184	89	32	14
14	320	229	171	210	160	600	532	117	174	78	31	14
15	288	230	169	190	170	560	489	114	153	73	30	16
16	265	285	160	180	170	470	543	110	155	67	28	16
17	242	349	150	160	180	530	951	107	486	60	27	15
18	231	309	140	150	170	638	1710	100	293	67	26	15
19	257	322	120	150	160	757	857	95	213	163	25	15
20	231	448	140	140	150	677	643	148	197	95	25	15
21	203	439	140	130	140	885	600	156	178	81	25	14
22	184	391	150	120	130	873	493	119	174	63	24	14
23	223	350	386	120	120	737	422	220	213	55	23	22
24	262	320	443	110	120	807	373	448	165	50	23	47
25	215	288	334	100	110	1010	334	317	144	47	25	29
26	209	270	270	110	110	1480	312	248	133	44	25	23
27	990	293	250	100	100	951	339	211	130	41	23	34
28	1670	288	240	98	100	647	288	190	132	68	22	41
29	1160	263	220	90	---	547	255	255	607	74	22	28
30	664	242	210	94	---	554	234	246	592	56	20	23
31	506	---	200	96	---	1140	---	1370	---	46	20	---
TOTAL	15420	9354	6763	5888	5590	15375	19277	6648	10599	3521	956	620
MEAN	497	312	218	190	200	496	643	214	353	114	30.8	20.7
MAX	1670	448	443	500	470	1480	2020	1370	1210	345	54	47
MIN	184	229	120	90	100	84	234	95	130	41	20	14
CFSM	3.38	2.12	1.48	1.29	1.36	3.37	4.37	1.46	2.40	.78	.21	.14
IN.	3.90	2.37	1.71	1.49	1.41	3.89	4.88	1.68	2.68	.89	.24	.16

CAL YR 1981 TOTAL 87638 MEAN 240 MAX 2860 MIN 20 CFSM 1.63 IN 22.18
WTR YR 1982 TOTAL 100011 MEAN 274 MAX 2020 MIN 14 CFSM 1.86 IN 25.31

01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY

LOCATION.--Lat 42°20'34", long 75°57'57", Broome County, Hydrologic Unit 02050102, on left bank at control-gate structure for Whitney Point Dam on Otselic River, 0.3 mi (0.5 km) upstream from spillway, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) north of Whitney Point.

DRAINAGE AREA.--257 mi^2 (666 km^2).

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to October 1970, published as "Whitney Point Reservoir at Whitney Point."

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1942 for flood control; first used for flood regulation on Mar. 9, 1942. Usable capacity, 86,440 acre-ft (107 hm^3) between elevations 950.0 ft or 289.56 m (sill of gates) and 1,010.0 ft or 307.85 m (crest of spillway). Dead storage, 28 acre-ft (34,500 m^3). Figures given herein represent total contents. Discharge is controlled by operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,005.0 ft (306.32 m) Mar. 23, 1948, contents, 71,440 acre-ft (88.1 hm^3); minimum, 950.4 ft (289.68 m) Sept. 2-4, 1953, contents, 36 acre-ft (44,400 m^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 982.66 ft (299.515 m) Oct. 30, contents, 26,370 acre-ft (32.5 hm^3); minimum, 965.61 ft (294.318 m) Apr. 21, contents, 4,843 acre-ft (5.97 hm^3).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1937)

960.0	1,250	980.0	22,240
965.0	4,260	985.0	30,200
970.0	9,270	990.0	38,980
975.0	15,290	1,000.0	59,220

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	973.10	976.80	972.61	966.12	966.28	966.04	968.59	969.15	974.29	973.15	973.01	973.13
2	973.36	973.94	972.06	966.17	966.71	966.10	970.03	969.59	973.20	973.13	972.97	973.14
3	973.33	972.88	971.29	966.03	966.64	966.12	968.94	970.00	972.76	972.97	973.04	973.14
4	973.48	973.07	970.51	966.17	967.34	966.04	969.42	970.36	973.03	972.93	973.07	973.14
5	973.25	973.22	969.64	967.01	970.26	966.01	968.88	970.68	972.97	973.07	973.09	973.14
6	973.10	973.25	968.73	966.41	972.30	966.08	967.46	970.98	972.80	973.17	973.10	973.13
7	973.52	973.37	967.77	966.34	973.60	966.18	966.04	971.26	972.99	973.23	973.10	973.10
8	973.20	973.40	966.87	966.07	973.90	966.20	965.87	971.54	972.85	973.28	973.09	973.07
9	973.12	973.41	966.21	966.07	973.92	966.11	966.23	971.86	972.90	973.32	973.10	973.04
10	972.94	973.26	966.03	966.08	973.19	966.04	966.28	972.20	972.96	973.18	973.10	973.02
11	973.31	973.20	966.09	965.85	971.59	966.08	966.35	972.49	973.07	973.04	973.11	973.01
12	973.25	973.14	966.19	965.93	969.60	966.21	966.20	972.74	973.16	973.00	973.11	973.01
13	972.98	973.07	966.20	966.07	967.71	966.33	966.05	972.95	973.17	973.00	973.09	973.00
14	973.03	973.06	966.15	966.21	966.18	967.04	966.27	972.87	973.19	972.99	973.07	973.00
15	973.09	973.04	966.11	966.28	965.84	966.92	966.12	972.84	973.15	973.03	973.05	972.99
16	973.10	973.09	966.07	966.14	965.84	966.31	966.02	972.92	973.14	973.09	973.02	973.01
17	973.02	973.27	966.05	965.94	966.09	966.24	966.41	973.03	973.32	973.13	973.03	973.03
18	972.94	973.25	966.03	965.91	966.19	966.47	968.05	973.13	972.47	973.17	973.04	973.04
19	973.14	973.14	966.01	966.06	966.24	967.26	968.13	973.20	972.90	973.20	973.05	973.05
20	973.32	973.10	965.94	966.19	966.16	966.84	966.58	973.22	972.88	973.20	973.05	973.06
21	973.30	973.40	965.93	966.27	966.07	966.97	965.76	973.25	973.05	973.07	973.08	973.06
22	973.17	973.22	965.95	966.22	966.01	967.58	965.92	973.24	973.23	973.02	973.08	973.07
23	973.03	973.04	966.21	966.18	965.98	967.20	966.00	973.25	973.35	973.03	973.07	973.09
24	973.10	972.97	966.79	966.08	965.99	966.70	966.10	973.63	973.33	973.05	973.08	973.11
25	973.12	972.92	966.45	966.01	965.98	966.73	966.08	973.81	973.17	973.06	973.10	973.13
26	973.03	972.77	966.07	965.95	965.99	967.70	966.11	973.33	972.99	973.07	973.13	973.15
27	973.58	972.83	966.06	965.96	966.00	968.68	966.79	973.12	972.81	973.07	973.14	973.15
28	976.83	973.09	966.13	965.96	966.03	967.54	967.59	973.07	972.81	973.18	973.15	973.16
29	981.18	973.15	966.11	965.97	---	966.24	968.16	973.08	973.12	973.21	973.15	973.17
30	982.34	973.06	966.07	965.97	---	966.20	968.66	973.21	973.30	973.14	973.14	973.17
31	979.89	---	966.02	965.97	---	966.43	---	974.01	---	973.07	973.13	---
MEAN	974.07	973.28	967.11	966.12	967.99	966.60	967.04	972.39	973.08	973.10	973.08	973.08
MAX	982.34	976.80	972.61	967.01	973.92	968.68	970.03	974.01	974.29	973.32	973.15	973.17
MIN	972.94	972.77	965.93	965.85	965.84	966.01	965.76	969.15	972.47	972.93	972.97	972.99
†	19,983	12,505	5,205	5,245	5,254	6,131	8,138	14,943	12,723	12,736	12,850	12,901
††	+118	-124	-119	+0.7	+0.2	+14.3	+33.7	+111	-37.3	+0.2	+1.9	+0.9

CAL YR 1981 MEAN 970.94 MAX 984.88 MIN 965.82 †† 0
WTR YR 1982 MEAN 970.59 MAX 982.34 MIN 965.76 †† +0.4

† Contents, in acre-feet, at end of month.
†† Change in contents, equivalent in cubic feet per second.

01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY

LOCATION.--Lat 42°13'05", long 75°50'55", Broome County, Hydrologic Unit 02050102, on left bank in Chenango Valley State Park, and 1.2 mi (1.9 km) downstream from Tioughnioga River and village of Chenango Forks.

DRAINAGE AREA.--1,483 mi² (3,841 km²).

PERIOD OF RECORD.--November 1912 to current year.

GAGE.--Water-stage recorder. Datum of gage is 871.628 ft (265.672 m) National Geodetic Vertical Datum of 1929. Nov. 11, 1912 to Oct. 1, 1914, nonrecording gage and Oct. 2, 1914 to Aug. 2, 1936, water-stage recorder at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Since March 1942, flood flows partly regulated by Whitney Point Lake (see station 01511000). Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--69 years (water years 1914-82), 2,424 ft³/s (68.65 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,000 ft³/s (2,720 m³/s) July 8, 1935, gage height, 20.3 ft (6.19 m), from floodmarks, from rating curve extended above 32,000 ft³/s (906 m³/s) on basis of slope-area measurement of peak flow; minimum, 84 ft³/s (2.38 m³/s) Sept. 19, 25, 1939, gage height, 2.24 ft (0.683 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 18,000 ft³/s (510 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	1900	*21,600	612	10.27	3.130	Mar. 13	2200	ice jam		10.46	3.188
Feb. 4	1500	ice jam		*14.99	4.569						

Minimum discharge, 202 ft³/s (5.72 m³/s) Sept. 15, 22, gage height, 2.53 ft (0.771 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2900	7300	2330	1800	2000	1200	13200	1430	6990	4520	537	246
2	3000	5870	2630	1700	3000	1200	12200	1330	7560	3000	500	265
3	3100	3940	3230	1700	3500	1100	9800	1240	6500	2450	500	278
4	3200	2980	2980	2900	4000	1000	12000	1160	4950	1990	482	278
5	2900	2760	2740	7490	5400	1100	9600	1070	4340	1610	456	265
6	2400	2970	2590	5320	4500	1100	7810	1010	4900	1380	430	258
7	4870	3450	2410	4000	3500	1100	5800	985	4820	1220	397	252
8	7670	3220	2300	3400	3000	1000	4500	968	3540	1270	388	246
9	7980	3340	2000	3000	2500	1000	4200	1050	2710	1700	388	240
10	6150	3110	1800	2500	2300	960	4000	1180	2220	1330	422	222
11	4310	2730	1600	1900	2100	1200	3900	1100	1870	1100	422	216
12	3660	2550	1600	1700	2000	2000	3900	962	1730	976	413	216
13	3070	2290	1500	1600	1900	4000	3950	943	1600	865	388	210
14	2470	2110	1500	1600	1800	8000	4850	1060	1600	781	364	210
15	2240	2050	1400	1700	1900	6600	4660	910	1440	680	364	205
16	2070	2510	1400	1700	2000	6000	4330	798	1340	660	334	210
17	1940	3390	1300	1600	2000	5980	4910	764	5010	612	298	205
18	1730	3170	1300	1600	1900	7010	9440	740	4460	593	285	216
19	1760	3270	1200	1500	1800	8500	8720	736	2320	720	278	210
20	1810	3550	1200	1400	1700	7920	6390	820	2040	876	278	205
21	1710	4270	1100	1500	1600	9260	5120	1040	1620	760	285	205
22	1570	3920	1100	1400	1600	9930	4250	997	1490	612	271	205
23	1640	3390	2000	1300	1500	9070	3520	1130	1680	537	278	222
24	2400	3010	4200	1400	1500	8860	3060	2240	1640	509	278	298
25	2130	2760	3600	1400	1400	9770	2750	2780	1390	482	278	356
26	1930	2550	2600	1300	1300	12300	2360	2210	1250	456	291	327
27	5760	2300	2300	1300	1200	11500	2340	1620	1140	422	278	305
28	16400	2480	2200	1300	1100	8390	2150	1340	1090	680	278	372
29	16300	2420	2100	1200	---	6420	1810	1930	3500	812	265	356
30	10600	2330	2000	1300	---	5580	1590	1940	8240	650	234	334
31	8870	---	1700	1500	---	7300	---	4030	---	546	228	---
TOTAL	138540	95990	63910	65010	64000	166350	167110	41513	94980	34799	10888	7633
MEAN	4469	3200	2062	2097	2286	5366	5570	1339	3166	1123	351	254
MAX	16400	7300	4200	7490	5400	12300	13200	4030	8240	4520	537	372
MIN	1570	2050	1100	1200	1100	960	1590	736	1090	422	228	205

CAL YR 1981 TOTAL 790685 MEAN 2166 MAX 19300 MIN 240
WTR YR 1982 TOTAL 950723 MEAN 2605 MAX 16400 MIN 205

01513110 SUSQUEHANNA RIVER AT JOHNSON CITY, NY

LOCATION.--Lat 42°06'37", long 75°58'30", Broome County, Hydrologic Unit 02050103, at intake of the New York State Electric and Gas Corp., Goudey Station, at Johnson City, 100 ft (30 m) upstream from Little Choconut Creek, 0.5 mi (0.8 km) downstream from C.F.J. Memorial Bridge, 3.5 mi (5.6 km) downstream from Chenango River and 4.8 mi (7.7 km) upstream from discontinued discharge station (01513500) at Vestal.

DRAINAGE AREA.--3,891 mi² (10,078 km²).

PERIOD OF RECORD.--Water years 1956 to current year. Prior to October 1960, published as 01513500, "at Johnson City", and prior to October 1967, published as 01513500, "at Vestal"; however, all water-temperature records were collected at present site.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1955 to current year.

REMARKS.--Daily water-temperature measurements made at 0800 hours. Measurements are reported to whole degrees Celsius. During winter periods water is at times recirculated from inside the plant through the intake to prevent icing conditions, thus resulting in reported water temperatures that are slightly above actual river temperatures.

COOPERATION.--Water-temperature records furnished by the New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1979, July 21, 1980; minimum daily, freezing point on many days during winter periods, except 1967, 1976, 1978-80 and 1982.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 28.0°C July 19; minimum daily, 1.0°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 to SEPTEMBER 1982

(ONCE DAILY AT 0800)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.0	9.0	2.0	1.0	2.0	2.0	7.0	13.0	18.0	19.0	24.0	21.0
2	11.0	9.0	2.0	1.0	2.0	2.0	5.0	13.0	18.0	18.0	24.0	21.0
3	11.0	6.0	2.0	2.0	1.0	2.0	5.0	13.0	18.0	18.0	23.0	22.0
4	10.0	4.0	3.0	2.0	1.0	2.0	5.0	14.0	17.0	18.0	24.0	23.0
5	11.0	4.0	3.0	1.0	1.0	2.0	3.0	14.0	17.0	18.0	24.0	19.0
6	12.0	6.0	3.0	1.0	1.0	1.0	3.0	16.0	16.0	20.0	24.0	19.0
7	12.0	1.0	2.0	1.0	1.0	2.0	1.0	14.0	16.0	22.0	24.0	21.0
8	11.0	3.0	3.0	1.0	1.0	2.0	1.0	17.0	16.0	24.0	24.0	20.0
9	10.0	3.0	3.0	1.0	1.0	2.0	2.0	14.0	17.0	24.0	24.0	19.0
10	9.0	6.0	3.0	1.0	1.0	2.0	2.0	13.0	18.0	23.0	24.0	20.0
11	9.0	6.0	2.0	1.0	1.0	2.0	4.0	14.0	18.0	24.0	23.0	21.0
12	9.0	6.0	2.0	1.0	1.0	2.0	4.0	16.0	18.0	24.0	22.0	22.0
13	10.0	3.0	2.0	1.0	1.0	1.0	4.0	17.0	17.0	24.0	21.0	22.0
14	9.0	2.0	2.0	1.0	1.0	1.0	4.0	18.0	16.0	25.0	20.0	22.0
15	9.0	2.0	2.0	1.0	2.0	1.0	6.0	18.0	17.0	26.0	21.0	24.0
16	10.0	3.0	2.0	1.0	2.0	1.0	7.0	19.0	18.0	26.0	22.0	22.0
17	9.0	3.0	2.0	1.0	2.0	2.0	10.0	20.0	18.0	27.0	23.0	20.0
18	9.0	2.0	1.0	1.0	2.0	2.0	11.0	21.0	18.0	27.0	21.0	19.0
19	9.0	4.0	2.0	1.0	2.0	2.0	9.0	22.0	18.0	28.0	21.0	17.0
20	8.0	6.0	2.0	2.0	2.0	2.0	10.0	21.0	19.0	27.0	22.0	17.0
21	8.0	4.0	2.0	1.0	2.0	3.0	12.0	21.0	18.0	24.0	21.0	16.0
22	9.0	3.0	2.0	1.0	2.0	3.0	10.0	19.0	18.0	24.0	19.0	17.0
23	10.0	2.0	2.0	2.0	2.0	3.0	8.0	16.0	18.0	25.0	19.0	17.0
24	8.0	2.0	1.0	2.0	2.0	3.0	9.0	14.0	17.0	24.0	21.0	16.0
25	7.0	3.0	1.0	2.0	2.0	4.0	11.0	14.0	18.0	24.0	22.0	16.0
26	7.0	2.0	1.0	2.0	2.0	4.0	12.0	16.0	21.0	26.0	20.0	19.0
27	7.0	3.0	1.0	2.0	2.0	3.0	12.0	18.0	21.0	26.0	21.0	17.0
28	11.0	3.0	2.0	2.0	2.0	1.0	11.0	18.0	22.0	24.0	20.0	17.0
29	10.0	3.0	2.0	2.0	---	2.0	11.0	17.0	21.0	23.0	18.0	18.0
30	8.0	3.0	1.0	1.0	---	2.0	12.0	18.0	19.0	23.0	18.0	18.0
31	9.0	---	1.0	1.0	---	6.0	---	19.0	---	24.0	19.0	---
MEAN	9.5	4.0	2.0	1.5	1.5	2.0	7.0	16.5	18.0	23.5	21.5	19.5
MAX	12.0	9.0	3.0	2.0	2.0	6.0	12.0	22.0	22.0	28.0	24.0	24.0
MIN	7.0	1.0	1.0	1.0	1.0	1.0	1.0	13.0	16.0	18.0	18.0	16.0

CAL YR 1981 MEAN 11.0 MAX 27.0 MIN 1.0
WTR YR 1982 MEAN 10.5 MAX 28.0 MIN 1.0

01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY

LOCATION.--Lat 41°59'05", long 76°30'05", Bradford County, Pa., Hydrologic Unit 02050103, on left bank 0.2 mi (0.3 km) upstream from Cayuta Creek, 0.4 mi (0.6 km) upstream from bridge on East Lockhart Street at Sayre, Pa., 1 mi (2 km) downstream from New York-Pennsylvania State line, and 2 mi (3 km) southeast of Waverly.

DRAINAGE AREA.--4,773 mi² (12,362 km²).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 743.96 ft (226.759 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to November 1939, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Minor regulation by upstream lakes and reservoirs. Slight diversion from upstream tributaries for operation of Erie (Barge) Canal.

AVERAGE DISCHARGE.--45 years (water years 1938-82), 7,592 ft³/s (215.0 m³/s), 21.60 in/yr (549 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121,000 ft³/s (3,430 m³/s) June 23, 1972, gage height, 21.24 ft (6.474 m); minimum daily, 237 ft³/s (6.71 m³/s) Sept. 22, 23, 1964; minimum gage height, 0.52 ft (0.158 m) Sept. 24, 25, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 21.4 ft (6.52 m), from flood profile (discharge, 128,000 ft³/s or 3,620 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 51,500 ft³/s (1,460 m³/s) Oct. 29 at 0100 hours, gage height, 12.40 ft (3.780 m), no peak above base of 52,000 ft³/s (1,470 m³/s); minimum, 493 ft³/s (13.96 m³/s) Sept. 19, gage height, 0.79 ft (0.241 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4890	18800	6450	5930	5400	2900	29100	5960	15900	17300	1840	768
2	4460	15300	6420	6400	9200	3000	35200	5400	16000	12500	1540	757
3	5200	12500	8060	6000	10000	3000	32400	4980	15600	9350	1510	670
4	5960	10100	8750	7000	24000	2800	36200	4610	14200	7410	1390	660
5	6650	8710	8360	17300	23000	2500	33200	4250	13200	6060	1300	640
6	6420	8400	7580	20600	21000	2700	27600	3870	20000	5110	1230	630
7	6750	9170	7060	16000	15000	2800	21700	3590	15800	4400	1170	601
8	10300	9970	6790	12000	12000	2900	16900	3430	13100	3840	1170	581
9	12900	9790	7090	9800	11000	2700	15100	3450	10500	3670	1070	591
10	13500	9390	6650	7800	9800	2700	14200	3590	8400	4100	1070	581
11	10500	8640	5790	5400	9400	2700	14600	3700	6990	3930	1070	563
12	8500	7890	5500	3500	8800	5200	14100	4160	6060	3330	988	545
13	7410	7230	5500	3500	8200	10800	13700	3730	5530	3120	975	537
14	6390	6650	5110	3700	7600	21700	14400	3280	5860	2910	923	537
15	5500	6220	4890	3800	6800	26400	14800	3250	5590	2600	873	528
16	4950	9600	4850	3600	6600	22100	14000	3000	5330	2450	836	519
17	4580	11800	4760	3500	6900	18500	13700	2690	10400	2140	813	510
18	4310	10100	4520	3400	6800	21700	21500	2500	14100	2040	802	501
19	3980	9350	4000	3300	6600	26000	26000	2370	11300	1890	779	501
20	3980	9310	3000	3200	6000	25200	22300	2330	8750	1950	745	510
21	3960	10100	2800	3000	5800	27200	17400	2410	6960	2280	745	510
22	3700	10200	3100	2900	5400	29800	14500	2670	5990	2120	723	510
23	3510	9530	5800	2700	5200	28300	12700	3120	5660	1780	723	537
24	3960	8640	12600	2600	4900	26900	11100	4190	5500	1590	723	554
25	4980	7750	13300	2400	4200	27300	9820	6290	5170	1360	734	572
26	5110	7060	11300	2400	3500	33400	8850	7480	4580	1230	757	620
27	7160	6650	8990	2500	3000	37500	8260	6580	3960	1150	734	757
28	36300	6480	7920	2600	2900	30800	8160	5300	3620	1170	701	873
29	46500	6520	7580	2700	---	22600	7690	6250	10500	1570	690	873
30	34500	6650	7030	2700	---	18000	6750	7650	21600	1840	670	848
31	24800	---	6190	2700	---	17700	---	10000	---	2120	640	---
TOTAL	311610	278500	207720	174930	248900	507800	535930	136080	296150	118310	29934	18384
MEAN	10050	9283	6701	5643	8889	16380	17860	4390	9872	3816	966	613
MAX	46500	18800	13300	20600	24000	37500	36200	10000	21600	17300	1840	873
MIN	3510	6220	2800	2400	2900	2500	6750	2330	3620	1150	640	501
CFSM	2.11	1.95	1.40	1.18	1.86	3.43	3.74	.92	2.07	.80	.20	.13
IN.	2.43	2.17	1.62	1.36	1.94	3.96	4.18	1.06	2.31	.92	.23	.14

CAL YR 1981 TOTAL 2409066 MEAN 6600 MAX 57400 MIN 563 CFSM 1.38 IN 18.78
WTR YR 1982 TOTAL 2864248 MEAN 7847 MAX 46500 MIN 501 CFSM 1.64 IN 22.32

01520500 TIOGA RIVER AT LINDLEY, NY

LOCATION.--Lat 42°01'43", long 77°07'57", Steuben County, Hydrologic Unit 02050104, on left bank just downstream from bridge on County Highway 120 at Lindley, and 6 mi (10 km) upstream from Canisteo River.

DRAINAGE AREA.--771 mi² (1,997 km²).

PERIOD OF RECORD.--January 1930 to current year.

REVISED RECORDS.--WSP 871: 1938. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 964.50 ft (293.980 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1937, nonrecording gage on bridge at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Since March 1979, floodflows regulated by detention in upstream reservoirs.

AVERAGE DISCHARGE.--52 years, 802 ft³/s (22.71 m³/s), 14.13 in/yr (359 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 128,000 ft³/s (3,620 m³/s) June 23, 1972, gage height, 26.27 ft (8.007 m), from floodmark in gage house, from rating curve extended above 31,000 ft³/s (878 m³/s) on basis of velocity-area and slope-area studies at gage height 19.2 ft (5.85 m) and conveyance study and slope-area measurements at gage heights 22.87 ft (6.971 m) and 26.27 ft (8.007 m); minimum, 6.1 ft³/s (0.17 m³/s) Sept. 1, 1939; minimum gage height, 2.68 ft (0.817 m) Aug. 28, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,200 ft³/s (289 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 5	1900	10,200	289	11.58	3.530
June 8	1730	*11,300	320	*12.11	3.691

Minimum discharge, 74 ft³/s (2.10 m³/s) Oct. 1, Sept. 14, 17, 18, 19, 20, gage height, 2.97 ft (0.905 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	947	358	360	2400	400	5160	255	659	927	113	84
2	185	599	361	480	2600	420	3300	219	1300	577	113	86
3	178	576	416	490	3300	410	2780	237	972	447	90	84
4	122	558	475	1140	3400	370	3440	242	1690	424	88	88
5	111	544	439	2940	1600	340	2020	233	5260	424	90	98
6	108	480	378	1200	880	330	1680	193	4120	345	106	98
7	154	646	334	800	780	380	1290	178	9920	277	94	96
8	205	484	378	900	640	310	1310	157	11000	254	96	92
9	172	396	559	430	640	220	1250	226	10600	232	120	84
10	148	318	455	450	580	260	1100	268	6540	169	106	82
11	131	282	410	320	400	390	1490	225	2620	154	106	78
12	120	279	400	310	320	2360	1650	220	1490	154	139	78
13	108	261	390	470	330	5780	1720	202	1130	172	98	76
14	102	247	350	420	360	5900	1700	180	987	166	88	76
15	115	246	340	420	370	6030	1440	194	811	157	86	76
16	113	1500	330	400	1840	3700	1160	222	707	188	86	76
17	108	1580	330	390	2500	2470	1100	197	4170	145	90	76
18	108	993	320	340	987	2110	1730	216	2190	145	90	76
19	108	984	280	240	638	2120	1420	229	1320	157	82	76
20	108	1250	200	220	460	2310	1040	280	842	280	88	76
21	108	1380	220	230	500	3090	831	287	749	780	94	643
22	104	1040	260	230	540	3650	829	280	672	280	84	566
23	106	830	800	230	560	2930	722	753	638	232	88	411
24	106	697	2030	220	600	2780	660	1290	638	172	86	397
25	113	661	928	190	560	2820	578	1320	555	104	88	384
26	122	601	777	190	450	5420	504	688	349	92	86	349
27	643	527	640	220	430	4450	448	544	304	96	88	471
28	3910	538	660	190	390	2290	407	785	312	215	94	424
29	5700	487	660	180	---	1670	334	1480	1530	349	92	157
30	3290	425	580	170	---	1560	268	1010	2630	169	92	131
31	1470	---	420	220	---	2180	---	771	---	117	84	---
TOTAL	18266	20356	15478	14990	29055	69450	43361	13581	76705	8400	2945	5589
MEAN	589	679	499	484	1038	2240	1445	438	2557	271	95.0	186
MAX	5700	1580	2030	2940	3400	6030	5160	1480	11000	927	139	643
MIN	90	246	200	170	320	220	268	157	304	92	82	76
CFSM	.76	.88	.65	.63	1.35	2.91	1.87	.57	3.32	.35	.12	.24
IN.	.88	.98	.75	.72	1.40	3.35	2.09	.66	3.70	.41	.14	.27

CAL YR 1981 TOTAL 246718 MEAN 676 MAX 7530 MIN 62 CFSM .88 IN 11.90
WTR YR 1982 TOTAL 318176 MEAN 872 MAX 11000 MIN 76 CFSM 1.13 IN 15.35

01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°43'08", Steuben County, Hydrologic Unit 02050104, on right bank 1,000 ft (305 m) upstream from Arkport Dam on Canisteo River, 1.3 mi (2.1 km) west of Arkport, and 2.3 mi (3.7 km) upstream from small tributary.

DRAINAGE AREA.--30.5 mi² (79.0 km²).

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1552: 1951-57. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1940 for flood control; first used for flood regulation on Mar. 31, 1940. Usable capacity, 7,936 acre-ft (9.79 hm³) between elevations 1,218.0 ft (371.25 m), sill of conduit, and 1,304.0 ft (397.46 m), crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,304.04 ft (397.471 m) June 23, 1972, contents, 7,944 acre-ft (9.79 hm³); minimum, 1,226.26 ft (373.764 m) Oct. 21, 22, 23, 24, 25, 1980, contents, 0.3 acre-ft (370 m³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,258.30 ft (383.530 m) June 6, contents, 1,705 acre-ft (2.10 hm³); minimum, 1,226.47 ft (373.828 m) many days in September, contents, 0.5 acre-ft (616 m³).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1937)

1,226.00	0	1,235.00	264	1,270.00	2,908
1,227.00	1	1,240.00	462	1,280.00	4,142
1,228.00	8	1,245.00	719	1,290.00	5,552
1,229.00	51	1,250.00	1,040	1,300.00	7,192
1,230.00	122	1,260.00	1,861	1,310.00	9,161

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1228.69	1228.63	1228.00	1228.19	1228.30	1228.03	1239.02	1227.92	1227.94	1228.06	1227.68	1226.47
2	1228.72	1228.15	1228.08	1228.18	1228.24	1228.00	1228.99	1227.91	1228.70	1227.92	1227.68	1226.48
3	1228.12	1228.08	1228.09	1228.15	1228.79	1228.00	1230.01	1227.91	1227.95	1227.86	1227.68	1226.47
4	1228.00	1228.06	1228.03	1231.11	1230.70	1227.96	1232.47	1227.90	1227.92	1227.85	1227.68	1226.47
5	1227.97	1228.05	1228.02	1231.73	1229.05	1228.02	1229.88	1227.89	1234.84	1227.82	1227.77	1226.47
6	1228.23	1229.51	1227.97	1229.53	1228.19	1227.97	1231.21	1227.89	1256.71	1227.80	1227.72	1226.47
7	1230.14	1229.97	1227.98	1228.48	1228.24	1227.97	1231.82	1227.88	1248.26	1227.79	1227.70	1226.47
8	1230.44	1229.17	1228.10	1228.34	1228.10	1227.94	1231.02	1232.19	1231.40	1227.79	1227.70	1226.47
9	1228.61	1228.59	1228.08	1228.33	1228.03	1227.94	1229.62	1233.08	1228.18	1227.78	1227.72	1226.47
10	1228.03	1228.09	1228.02	1228.57	1228.00	1227.93	1230.20	1228.11	1228.11	1227.78	1227.73	1226.47
11	1227.99	1228.07	1228.02	1228.71	1228.06	1228.02	1232.09	1228.02	1228.02	1227.80	1227.70	1226.47
12	1227.98	1228.06	1228.01	1228.59	1228.02	1230.90	1231.63	1227.98	1227.95	1227.85	1227.68	1226.47
13	1227.97	1228.03	1227.99	1228.23	1227.98	1236.50	1234.40	1227.96	1227.92	1227.80	1227.69	1226.47
14	1227.95	1228.03	1227.98	1228.17	1227.97	1243.28	1234.12	1227.94	1227.92	1227.78	1227.68	1226.48
15	1227.94	1228.03	1227.99	1228.11	1227.96	1231.83	1230.69	1227.92	1227.87	1227.78	1227.68	1226.47
16	1227.93	1235.57	1227.98	1228.08	1228.86	1229.16	1230.97	1227.90	1230.23	1227.78	1227.68	1226.47
17	1227.92	1231.28	1227.96	1228.01	1228.76	1232.54	1231.33	1227.90	1235.22	1227.78	1227.68	1226.47
18	1227.92	1230.43	1227.96	1228.06	1228.21	1229.41	1229.94	1227.88	1228.38	1227.81	1227.68	1226.47
19	1227.97	1229.48	1227.98	1227.99	1228.13	1229.17	1228.19	1227.88	1228.05	1227.78	1227.68	1226.47
20	1227.99	1235.07	1227.98	1227.97	1228.10	1230.03	1228.08	1227.90	1227.97	1230.03	1227.69	1226.47
21	1227.97	1230.31	1227.97	1227.97	1228.10	1233.14	1228.18	1227.88	1227.95	1227.91	1227.71	1226.47
22	1227.95	1228.84	1227.92	1227.95	1228.08	1232.27	1228.05	1227.92	1227.89	1227.76	1227.72	1226.47
23	1228.67	1228.23	1232.35	1227.95	1228.07	1230.50	1228.01	1227.98	1227.85	1227.72	1227.68	1226.47
24	1228.29	1228.15	1230.09	1227.96	1228.10	1231.58	1227.99	1227.94	1227.82	1227.70	1227.68	1226.47
25	1227.97	1228.10	1228.39	1227.95	1228.12	1232.81	1227.97	1227.92	1227.80	1227.68	1227.71	1226.47
26	1227.96	1228.05	1228.26	1227.93	1228.10	1237.72	1227.97	1227.90	1227.80	1227.67	1227.12	1226.47
27	1233.86	1228.54	1228.22	1227.92	1228.10	1230.02	1227.97	1227.88	1227.82	1227.67	1226.56	1226.47
28	1249.93	1228.18	1228.21	1227.92	1228.10	1229.07	1227.96	1228.48	1227.94	1227.85	1226.56	1226.47
29	1236.62	1228.10	1228.19	1227.92	---	1228.77	1227.94	1228.33	1232.82	1227.81	1226.55	1226.47
30	1230.36	1228.04	1228.16	1227.93	---	1229.80	1227.92	1227.98	1230.50	1227.72	1226.52	1226.47
31	1229.64	---	1228.15	1228.06	---	1236.60	---	1227.94	---	1227.70	1226.47	---
MEAN	1229.54	1229.10	1228.26	1228.39	1228.30	1230.74	1230.19	1228.26	1230.52	1227.87	1227.49	1226.47
MAX	1249.93	1235.57	1232.35	1231.73	1230.70	1243.28	1239.02	1233.08	1256.71	1230.03	1227.77	1226.48
MIN	1227.92	1228.03	1227.92	1227.92	1227.96	1227.93	1227.92	1227.88	1227.80	1227.67	1226.47	1226.47
†	49.3	7.9	15.3	14.9	9.7	621	7.4	7.5	15.7	5.8	0.5	0.5
††	+0.7	-0.7	+0.1	0	-0.1	+9.9	-10.3	0	+0.1	-0.2	-0.1	0

CAL YR 1981 MEAN 1228.08 MAX 1249.93 MIN 1226.71 †† 0
WTR YR 1982 MEAN 1228.76 MAX 1256.71 MIN 1226.47 †† 0

† Contents, in acre-feet, at end of month.
†† Change in contents, equivalent in cubic feet per second.

01521500 CANISTEO RIVER AT ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°42'42", Steuben County, Hydrologic Unit 02050104, on left bank 0.2 mi (0.3 km) downstream from Arkport Dam, and 0.9 mi (1.4 km) west of Arkport.

DRAINAGE AREA.--30.6 mi² (79.3 km²).

PERIOD OF RECORD.--January 1937 to current year.

REVISED RECORDS.--WSP 1552: 1952-57. WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,202.85 ft (366.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Since November 1939, flows above 500 ft³/s (14.2 m³/s) controlled by detention in Arkport Reservoir (see station 01521000).

AVERAGE DISCHARGE.--45 years, 35.4 ft³/s (1.00 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s (56.6 m³/s) Mar. 5, 1938, Feb. 20, 1939; maximum gage height, 5.63 ft (1.716 m) Feb. 19, 1939 (ice jam); practically no flow July 30, 1938, Sept. 30, 1939 (result of construction operations).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a discharge of 4,820 ft³/s (137 m³/s), on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 651 ft³/s (18.4 m³/s) Oct. 28, gage height, 3.08 ft (0.939 m); minimum, 1.7 ft³/s (0.05 m³/s) Sept. 13, 14, gage height, 0.65 ft (0.198 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	33	21	18	21	20	311	11	10	28	3.3	2.5
2	62	29	27	17	66	17	75	10	34	18	3.1	2.7
3	40	24	29	19	100	14	93	9.6	15	13	3.0	4.1
4	25	21	24	60	183	12	129	8.8	11	12	3.1	3.2
5	18	19	23	107	63	11	64	8.0	135	9.9	10	2.6
6	30	42	19	48	35	11	50	7.6	558	7.8	4.4	2.3
7	98	47	19	37	30	10	55	7.2	500	6.6	3.4	2.5
8	90	33	27	30	25	9.4	71	81	154	6.6	3.3	2.3
9	41	28	28	26	21	11	42	119	37	5.2	4.9	2.3
10	28	23	23	22	18	13	50	33	30	4.6	6.2	2.1
11	21	21	23	19	16	16	72	22	24	4.9	3.8	2.0
12	17	19	22	18	15	80	68	18	18	9.9	3.1	2.0
13	14	16	21	17	13	287	111	15	16	5.5	2.9	1.9
14	12	15	19	16	12	360	112	12	15	4.6	2.7	1.9
15	10	15	18	15	12	206	65	10	11	4.0	2.4	3.1
16	9.3	314	17	14	71	102	66	8.9	67	3.7	2.4	3.2
17	8.5	105	16	13	64	185	69	7.8	179	3.7	2.3	2.9
18	8.0	73	15	12	54	106	55	7.0	44	5.2	2.4	2.6
19	11	52	14	11	26	99	36	7.0	27	4.3	2.2	2.7
20	14	267	14	10	23	109	30	7.8	21	48	2.7	2.5
21	12	85	13	11	22	196	35	6.9	20	19	3.4	2.4
22	9.5	54	14	10	21	164	27	11	16	8.0	4.8	3.2
23	32	41	110	10	20	119	23	18	12	5.1	2.8	4.3
24	30	34	84	9.8	33	148	20	13	9.9	4.1	2.6	4.2
25	19	30	35	9.6	54	169	18	10	8.5	3.5	2.5	3.5
26	17	26	28	9.4	48	340	17	8.0	7.8	3.0	2.4	3.2
27	321	41	25	9.2	27	90	17	6.8	11	3.0	2.2	8.2
28	609	35	23	9.0	23	66	16	20	18	13	2.2	6.6
29	332	28	22	9.0	---	51	13	30	100	12	2.0	4.0
30	58	23	20	9.6	---	70	12	15	73	5.3	2.0	2.9
31	42	---	19	12	---	214	---	10	---	4.0	2.3	---
TOTAL	2091.3	1593	812	637.6	1096	3305.4	1822	559.4	2182.2	285.5	100.8	93.9
MEAN	67.5	53.1	26.2	20.6	39.1	107	60.7	18.0	72.7	9.21	3.25	3.13
MAX	609	314	110	107	183	360	311	119	558	48	10	8.2
MIN	8.0	15	13	9.0	12	9.4	12	6.8	7.8	3.0	2.0	1.9

CAL YR 1981 TOTAL 11652.0 MEAN 31.9 MAX 609 MIN 2.1
WTR YR 1982 TOTAL 14579.1 MEAN 39.9 MAX 609 MIN 1.9

01523000 ALMOND LAKE NEAR ALMOND, NY

LOCATION.--Lat 42°20'56", long 77°42'10", Steuben County, Hydrologic Unit 02050104, at Almond Dam on Canacadea Creek, 2 mi (3 km) northeast of Almond, and 3 mi (5 km) upstream from mouth.

DRAINAGE AREA.--55.8 mi² (145 km²).

PERIOD OF RECORD.--July 1949 to September 1952 (monthly elevations and contents), October 1952 to current year. Prior to October 1970, published as "Almond Reservoir near Almond."

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in June 1949 for flood control; first used for flood regulation on Mar. 28, 1950. Usable capacity, 14,800 acre-ft (18.2 hm³) between elevations 1,229.0 ft or 374.60 m (sill of gates) and 1,300.0 ft or 396.24 m (crest of spillway). No dead storage. Figures given herein represent usable contents. Discharge is controlled by the operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,298.58 ft (395.807 m) June 23, 1972, contents, 14,100 acre-ft (17.4 hm³); no contents for many days each year 1949-65.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,275.91 ft (388.897 m) Oct. 28, contents, 5,314 acre-ft (6.55 hm³); minimum, 1,249.58 ft (380.872 m) Mar. 28, contents, 536 acre-ft (660.888 m³).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1938)

1,240.00	80	1,260.00	1,750
1,245.00	230	1,270.00	3,750
1,250.00	570	1,280.00	6,570
1,255.00	1,080	1,290.00	10,300

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1255.15	1269.63	1250.51	1250.78	1250.93	1250.64	1252.12	1255.08	1255.03	1255.37	1255.08	1255.17
2	1255.20	1268.81	1250.74	1250.32	1250.91	1250.38	1250.36	1255.10	1255.47	1255.34	1255.06	1255.20
3	1255.60	1262.98	1250.72	1250.22	1250.77	1250.29	1251.04	1255.11	1255.62	1255.39	1255.07	1255.31
4	1255.69	1255.08	1250.37	1250.98	1251.51	1250.17	1251.37	1255.09	1255.50	1255.51	1255.09	1255.38
5	1255.52	1253.07	1250.41	1251.13	1250.65	1250.74	1250.89	1255.06	1257.06	1255.55	1255.36	1255.40
6	1255.35	1251.22	1250.47	1251.58	1250.82	1250.79	1251.47	1255.02	1267.43	1255.52	1255.46	1255.40
7	1256.09	1251.54	1250.31	1251.53	1250.30	1250.89	1251.30	1255.03	1262.40	1255.42	1255.49	1255.40
8	1255.86	1251.50	1250.45	1250.71	1250.69	1250.81	1250.99	1255.39	1256.29	1255.30	1255.50	1255.39
9	1255.73	1251.12	1251.01	1251.14	1250.80	1250.68	1250.57	1255.52	1255.67	1255.20	1255.58	1255.37
10	1256.05	1250.58	1251.17	1251.19	1250.32	1250.57	1250.40	1255.09	1255.55	1255.25	1255.75	1255.35
11	1256.02	1250.95	1251.08	1250.90	1250.19	1250.67	1250.60	1255.10	1255.32	1255.34	1255.86	1255.33
12	1255.85	1251.33	1250.62	1250.78	1250.23	1251.90	1251.11	1255.02	1255.38	1255.47	1255.87	1255.31
13	1255.79	1251.38	1250.59	1250.66	1250.15	1253.88	1252.08	1254.93	1255.46	1255.58	1255.86	1255.29
14	1255.68	1251.33	1250.54	1250.53	1250.08	1257.59	1250.74	1254.99	1255.49	1255.68	1255.85	1255.26
15	1255.56	1251.21	1250.49	1250.39	1250.34	1253.65	1251.18	1255.03	1255.45	1255.67	1255.82	1255.32
16	1255.38	1253.32	1250.42	1250.27	1250.61	1250.87	1251.85	1255.05	1255.52	1255.33	1255.78	1255.39
17	1255.22	1251.63	1250.27	1250.46	1250.56	1251.41	1252.09	1255.04	1255.77	1255.13	1255.74	1255.40
18	1255.15	1250.80	1250.13	1250.48	1251.09	1251.46	1251.36	1255.01	1255.35	1255.12	1255.71	1255.40
19	1255.14	1251.55	1250.33	1250.48	1251.27	1252.30	1250.33	1254.99	1255.44	1255.11	1255.67	1255.40
20	1255.18	1252.94	1250.64	1250.47	1251.25	1251.41	1251.10	1255.17	1255.44	1255.36	1255.62	1255.38
21	1255.20	1251.68	1250.84	1250.45	1251.18	1252.71	1251.94	1255.39	1255.35	1255.28	1255.63	1255.37
22	1255.19	1250.93	1250.84	1250.39	1251.04	1251.22	1252.79	1255.53	1255.34	1255.01	1255.59	1255.38
23	1255.32	1251.34	1251.55	1250.30	1250.78	1251.27	1253.38	1255.90	1255.27	1254.98	1255.52	1255.49
24	1255.92	1250.55	1250.58	1250.26	1250.52	1251.41	1253.82	1255.67	1255.19	1254.94	1255.43	1255.55
25	1256.11	1250.68	1250.55	1250.16	1250.29	1251.94	1254.16	1255.47	1255.22	1254.88	1255.35	1255.56
26	1256.21	1250.75	1250.69	1250.08	1250.92	1254.69	1254.49	1255.26	1255.29	1254.95	1255.26	1255.56
27	1260.34	1250.76	1250.36	1250.35	1251.31	1251.01	1254.82	1255.18	1255.37	1255.06	1255.19	1255.67
28	1273.90	1250.90	1250.15	1250.47	1251.04	1250.57	1255.13	1255.27	1255.50	1255.49	1255.18	1255.53
29	1274.85	1250.68	1250.53	1250.28	---	1250.53	1255.18	1255.50	1257.35	1255.11	1255.18	1255.26
30	1271.89	1250.33	1250.61	1250.03	---	1250.52	1255.14	1255.28	1255.47	1255.11	1255.18	1255.15
31	1270.49	---	1250.43	1250.34	---	1252.42	---	1255.19	---	1255.09	1255.16	---
MEAN	1257.96	1253.02	1250.59	1250.58	1250.73	1251.59	1252.13	1255.21	1256.20	1255.28	1255.48	1255.38
MAX	1274.85	1269.63	1251.55	1251.58	1251.51	1257.59	1255.18	1255.90	1267.43	1255.68	1255.87	1255.67
MIN	1255.14	1250.33	1250.13	1250.03	1250.08	1250.17	1250.33	1254.93	1255.03	1254.88	1255.06	1255.15
†	3,755	611	628	640	651	1,042	1,093	1,097	1,108	1,090	1,099	1,091
††	+43.8	-52.8	+0.3	+0.2	+0.2	+6.4	+0.9	+0.1	+0.2	-0.3	+0.1	-0.1

CAL YR 1981 MEAN 1253.34 MAX 1274.85 MIN 1250.01 †† 0
WTR YR 1982 MEAN 1253.70 MAX 1274.85 MIN 1250.03 †† 0

† Contents, in acre-feet, at end of month.
†† Change in contents, equivalent in cubic feet per second.

01523500 CANACADEA CREEK NEAR HORNELL, NY

LOCATION.--Lat 42°20'05", long 77°41'00", Steuben County, Hydrologic Unit 02050104, on right bank 35 ft (11 m) downstream from bridge on State Highway 21, 1.2 mi (1.9 km) west of Hornell, 1.5 mi (2.4 km) downstream from Almond Dam, and 2 mi (3 km) upstream from mouth.

DRAINAGE AREA.--57.9 mi^2 (150 km^2).

PERIOD OF RECORD.--October 1940 to December 1942, October 1944 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WRD NY 1971: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,185.68 ft (361.395 m) National Geodetic Vertical Datum of 1929. Oct. 23, 1940 to Dec. 31, 1942, at site 185 ft (56 m) upstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Since October 1948, floodflows regulated by detention in Almond Lake (see station 01523000). Occasional regulation at low flows to clear debris from gates at Almond Lake. Monthly figures for 1952-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--40 years (1940-42, 1944-82), 64.7 ft^3/s (1.832 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,430 ft^3/s (267 m^3/s) May 17, 1945, gage height, 5.14 ft (1.567 m), from rating curve extended above 3,400 ft^3/s (96.3 m^3/s); maximum gage height, 6.65 ft (2.027 m) June 3, 1947; minimum discharge, 0.5 ft^3/s (0.014 m^3/s) May 29, 1965, gage height, 0.61 ft (0.186 m); minimum daily, 0.6 ft^3/s (0.017 m^3/s) May 30 to June 1, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a stage of 16.61 ft (5.063 m), discharge, 21,000 ft^3/s (595 m^3/s), from floodmarks on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,350 ft^3/s (123 m^3/s) Nov. 3, gage height, 5.34 ft (1.628 m); minimum, 4.9 ft^3/s (0.14 m^3/s) July 27, gage height, 0.80 ft (0.244 m) result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	164	40	35	40	39	616	24	38	55	16	10
2	106	162	54	34	80	30	168	21	38	44	13	10
3	53	1120	61	33	131	24	152	19	38	31	13	10
4	53	164	57	260	284	19	363	18	38	30	14	10
5	53	152	42	226	153	17	102	17	334	28	14	10
6	53	108	42	98	95	16	101	17	782	28	14	11
7	173	68	42	62	55	15	100	80	964	28	14	11
8	312	67	43	42	35	15	99	200	240	28	14	10
9	39	66	43	37	32	14	98	137	67	17	14	10
10	45	44	44	35	30	18	87	57	66	13	22	10
11	48	28	58	32	28	26	158	40	54	12	14	10
12	38	33	47	30	26	99	93	40	32	9.8	14	10
13	32	36	40	28	24	408	217	28	32	9.4	14	10
14	32	35	37	27	23	658	186	23	32	19	14	10
15	32	44	34	26	22	619	87	23	32	34	14	10
16	32	470	32	24	146	242	85	22	98	23	14	10
17	26	265	29	23	135	361	114	22	343	17	14	10
18	23	125	27	22	50	194	120	22	78	18	13	10
19	23	74	25	21	40	287	65	18	45	30	14	10
20	23	459	24	20	35	178	34	14	45	100	16	10
21	23	210	24	20	30	420	22	15	40	46	16	10
22	23	86	24	19	25	456	18	32	33	24	16	21
23	23	93	190	19	22	248	18	46	33	17	16	35
24	23	81	164	18	19	310	18	99	27	17	16	27
25	23	53	68	18	18	447	19	48	19	12	16	18
26	23	53	58	17	18	721	22	40	18	5.8	16	18
27	270	84	50	17	31	308	31	31	18	5.3	12	14
28	231	65	44	17	38	108	30	41	33	115	10	13
29	533	64	39	16	---	126	25	88	649	51	10	13
30	518	48	37	16	---	117	25	44	204	22	10	13
31	191	---	35	16	---	434	---	38	---	17	10	---
TOTAL	3260	4521	1554	1308	1665	6974	3273	1364	4470	906.3	437	384
MEAN	105	151	50.1	42.2	59.5	225	109	44.0	149	29.2	14.1	12.8
MAX	533	1120	190	260	284	721	616	200	964	115	22	35
MIN	23	28	24	16	18	14	18	14	18	5.3	10	10

CAL YR 1981 TOTAL 23564.2 MEAN 64.6 MAX 1120 MIN 1.2
WTR YR 1982 TOTAL 30116.3 MEAN 82.5 MAX 1120 MIN 5.3

01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNELL, NY

LOCATION.--Lat 42°18'50", long 77°39'05", Steuben County, Hydrologic Unit 02050104, on right bank 235 ft (72 m) upstream from Erie Railroad bridge in Hornell, 0.3 mi (0.5 km) upstream from Crosby Creek, and 1.5 mi (2.4 km) downstream from Canacadea Creek.

DRAINAGE AREA.--158 mi^2 (409 km^2).

PERIOD OF RECORD.--August 1942 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,131.32 ft (344.826 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Diversion from Carrington Creek, a tributary upstream from station, by city of Hornell for municipal supply (1982 average, 3.4 ft^3/s or 0.10 m^3/s); sewage enters river downstream from gage. Since Nov. 1939, flood flows regulated by Arkport Reservoir (see station 01521000), and, since October 1948, by Almond Lake (see station 01523000); normal regulation occasionally sufficient to materially affect figures of monthly runoff.

COOPERATION.--Records of diversion from Carrington Creek furnished by city of Hornell.

AVERAGE DISCHARGE.--40 years, 157 ft^3/s (4.446 m^3/s), 13.49 in/yr (343 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft^3/s (271 m^3/s) June 23, 1972, gage height, 13.45 ft (4.100 m), from floodmark, from rating curve extended above 7,600 ft^3/s (215 m^3/s) on basis of critical-depth measurement of peak flow; minimum, 7.4 ft^3/s (0.21 m^3/s) Sept. 13, 14, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,500 ft^3/s (127 m^3/s) Nov. 3, gage height, 8.72 ft (2.658 m); minimum daily, 20 ft^3/s (0.57 m^3/s) Sept. 12, 13, result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	265	79	68	70	70	1300	80	77	171	41	23
2	186	240	92	66	170	60	400	76	119	129	40	25
3	120	1160	96	100	520	52	300	70	84	101	36	31
4	86	234	90	524	620	47	740	68	78	96	45	28
5	82	213	82	505	250	41	300	66	582	87	45	26
6	150	222	79	231	170	35	200	66	1600	78	37	25
7	280	178	78	216	130	32	210	88	1480	74	35	25
8	450	105	88	150	100	32	250	310	501	74	40	25
9	200	83	93	119	76	33	200	388	188	63	46	27
10	130	75	88	90	62	60	190	150	156	52	50	24
11	100	62	95	80	56	78	350	110	135	46	37	21
12	86	60	94	72	52	282	300	103	100	55	35	20
13	76	60	82	66	47	1210	459	88	93	48	35	20
14	66	59	76	62	47	1300	468	77	93	44	36	24
15	58	61	70	58	60	925	255	74	83	56	37	34
16	56	997	64	56	250	468	241	72	177	58	35	29
17	51	638	60	54	200	500	270	69	710	49	31	25
18	48	349	54	50	150	279	256	63	205	51	30	24
19	52	219	50	49	80	477	176	56	135	49	29	23
20	53	978	47	47	70	470	128	57	120	142	38	23
21	51	477	47	45	60	901	122	56	112	117	40	23
22	51	266	60	43	54	788	103	86	97	117	34	26
23	65	226	499	41	50	565	94	110	90	127	34	27
24	70	207	421	39	70	590	89	163	78	76	36	26
25	63	92	206	38	80	669	86	93	66	42	36	24
26	61	79	139	37	74	1010	88	80	64	35	33	24
27	969	164	93	36	66	261	120	66	68	31	30	54
28	1720	175	82	36	72	220	110	82	118	149	28	58
29	1060	98	78	36	---	240	90	151	425	89	26	47
30	614	86	74	35	---	300	84	89	548	58	26	39
31	299	---	70	40	---	700	---	76	---	71	26	---
TOTAL	7549	8128	3326	3089	3706	12695	7979	3183	8382	2435	1107	850
MEAN	244	271	107	99.6	132	410	266	103	279	78.5	35.7	28.3
MAX	1720	1160	499	524	620	1300	1300	388	1600	171	50	58
MIN	48	59	47	35	47	32	84	56	64	31	26	20

CAL YR 1981 TOTAL 50346 MEAN 138 MAX 1740 MIN 15
WTR YR 1982 TOTAL 62429 MEAN 171 MAX 1720 MIN 20

01526500 TIOGA RIVER NEAR ERWINS, NY

LOCATION.--Lat 42°07'16", long 77°07'46", Steuben County, Hydrologic Unit 02050104, on right bank 20 ft (6 m) downstream from bridge on Mulholland Road, 1.1 mi (1.8 km) northeast of Erwins, and 1.1 mi (1.8 km) downstream from Canisteo River.

DRAINAGE AREA.--1,377 mi² (3,566 km²).

PERIOD OF RECORD.--July 1918 to current year.

REVISED RECORDS.--WSP 891: 1935-38. WSP 1672: 1919(M), 1927(M), 1929(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 931.24 ft (283.842 m) National Geodetic Vertical Datum of 1929. Prior to June 21, 1931, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for winter periods, which are fair. High flows regulated by upstream reservoirs.

AVERAGE DISCHARGE.--64 years, 1,375 ft³/s (38.94 m³/s), 13.56 in/yr (344 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 190,000 ft³/s (5,380 m³/s) June 23, 1972, from rating curve extended above 90,000 ft³/s (2,550 m³/s) on basis of computation of peak flow at Lindley and Canisteo River at Erwins, 7.2 mi (11.6 km) and 2.0 mi (3.2 km) upstream, respectively, adjusted for flow from intervening area, gage height, 26.74 ft (8.150 m), from floodmarks; minimum, 18 ft³/s (0.51 m³/s) Sept. 2, 3, 1939; minimum gage height, 0.40 ft (0.122 m) Sept. 8, 9, 1954, July 23, Aug. 10, 11, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft³/s (481 m³/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft³/s)	(m³/s)	(ft)	(m)	Date	Time	(ft³/s)	(m³/s)	(ft)	(m)
Mar. 15	2200	18,800	532	10.82	3.298	June 6	0100	*22,700	643	*11.89	3.624

Minimum discharge, 115 ft³/s (3.26 m³/s) Sept. 20, 21, gage height, 0.73 ft (0.223 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	1900	788	600	1000	620	9100	516	922	2360	348	150
2	561	1320	780	680	2500	640	5500	457	1560	1390	307	157
3	567	1220	877	800	4000	600	4190	462	1390	1040	273	150
4	423	1890	939	1000	4300	560	5680	457	1790	890	245	157
5	338	1130	882	2400	2200	520	3390	440	7160	832	241	172
6	312	1030	779	2000	1200	480	2860	395	16600	702	259	165
7	423	1310	704	1600	980	520	2220	369	13800	576	228	157
8	866	1050	740	1100	820	440	2210	379	13100	512	219	154
9	766	871	780	720	760	360	2210	1490	11400	484	273	140
10	475	747	820	700	700	430	1970	988	7670	391	287	137
11	399	652	760	580	540	540	2750	660	3460	339	273	127
12	365	606	700	540	440	2750	2810	573	2120	327	259	124
13	315	568	660	620	430	10400	2960	516	1610	331	241	121
14	277	531	620	600	450	12000	3280	445	1400	319	195	118
15	276	526	580	580	500	9680	2600	406	1180	319	183	118
16	271	1480	540	560	2070	6440	2140	423	1160	369	179	124
17	254	3510	540	540	3770	4700	2110	390	7730	316	183	130
18	249	2330	480	480	1780	4320	2790	395	4310	279	187	12[illegible]
19	239	2070	420	380	1160	4050	2300	384	2440	301	168	1[illegible]
20	237	2180	350	360	700	4250	1700	457	1590	431	168	[illegible]
21	237	3230	470	350	720	6040	1430	498	1320	1270	187	554
22	229	2450	567	340	740	7420	1360	462	1160	574	179	632
23	229	1850	973	330	760	5390	1170	1390	1060	430	179	474
24	275	1530	2410	320	800	5250	1060	2100	999	345	176	434
25	307	1360	2040	290	760	5550	930	2200	884	240	176	439
26	288	1220	1450	290	660	9430	835	1220	635	204	172	412
27	1770	1090	1000	310	640	7280	767	922	547	199	165	529
28	12000	1200	1000	290	600	3770	723	963	567	1540	168	554
29	8960	1050	920	280	---	2860	639	1940	3200	1510	161	307
30	5760	926	820	270	---	2690	541	1480	6970	653	157	254
31	2750	---	720	270	---	4080	---	1070	---	417	147	---
TOTAL	40603	42827	26109	20180	35980	124060	74225	24847	119734	19890	6583	7350
MEAN	1310	1428	842	651	1285	4002	2474	802	3991	642	212	245
MAX	12000	3510	2410	2400	4300	12000	9100	2200	16600	2360	348	632
MIN	185	526	350	270	430	360	541	369	547	199	147	118
CFSM	.95	1.04	.61	.47	.93	2.91	1.80	.58	2.90	.47	.15	.18
IN.	1.10	1.16	.71	.55	.97	3.35	2.01	.67	3.23	.54	.18	.20

CAL YR 1981 TOTAL 424802 MEAN 1164 MAX 12000 MIN 111 CFSM .85 IN 11.48
WTR YR 1982 TOTAL 542388 MEAN 1486 MAX 16600 MIN 118 CFSM 1.08 IN 14.65

01528000 FIVEMILE CREEK NEAR KANONA, NY

LOCATION.--Lat 42°23'18", long 77°21'29", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from town of Wheeler highway bridge, 1.3 mi (2.1 km) upstream from mouth and Kanona.

DRAINAGE AREA.--66.8 mi^2 (173 km^2).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,170.30 ft (356.707 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--45 years, 76.4 ft^3/s (2.164 m^3/s), 15.53 in/yr (394 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,110 ft^3/s (145 m^3/s) June 23, 1972, gage height, 6.95 ft (2.118 m) present datum; maximum gage height, 7.10 ft (2.164 m) present datum, Mar. 31, 1940 (ice jam); minimum discharge, 0.04 ft^3/s (0.001 m^3/s) Sept. 27, 29, 1941; minimum gage height, 0.67 ft (0.204 m) Oct. 10, 11, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 880 ft^3/s (24.9 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	0630	*1,720	48.7	5.19	1.582	June 6	1500	1,130	32.0	4.50	1.372
Mar. 14	0500	a1,400	39.6	b*5.61	1.710						

a About.
b Ice jam.

Minimum discharge, 2.5 ft^3/s (0.07 m^3/s) Sept. 26, gage height, 0.71 ft (0.216 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	134	58	56	110	42	636	27	158	102	10	6.1
2	54	108	62	59	110	37	285	27	298	63	7.2	6.1
3	54	91	66	54	130	33	208	25	146	56	7.2	6.8
4	52	76	60	123	220	32	246	22	90	43	13	5.7
5	39	68	55	346	300	31	155	21	281	39	85	5.0
6	40	76	54	189	300	30	132	23	1090	30	37	4.1
7	91	78	50	137	260	29	119	29	874	25	22	4.7
8	148	73	54	78	230	28	122	80	319	23	24	4.7
9	102	69	59	78	210	28	118	177	140	20	20	4.1
10	67	62	52	62	190	40	126	92	99	16	19	3.8
11	52	52	49	60	170	50	177	58	79	15	15	3.8
12	47	46	45	58	160	140	196	46	61	21	12	3.8
13	35	42	42	56	140	490	257	41	57	16	10	3.8
14	31	44	41	56	120	1200	272	35	61	15	9.3	3.3
15	27	39	44	56	110	700	179	31	51	18	8.4	8.0
16	23	305	46	43	218	320	150	27	62	16	7.6	30
17	19	447	39	40	408	290	145	25	216	14	14	25
18	19	228	35	40	350	328	130	23	121	17	11	15
19	19	160	33	39	190	277	104	23	73	16	8.0	7.6
20	20	331	32	38	150	266	86	25	60	30	7.6	5.0
21	20	295	32	38	120	511	78	24	47	25	7.6	4.1
22	18	176	32	37	110	641	67	28	42	17	7.2	3.5
23	16	136	120	35	90	524	59	61	55	13	6.8	3.5
24	31	109	160	35	78	524	53	50	49	11	7.6	3.5
25	20	96	110	33	68	607	48	36	35	9.8	7.6	3.3
26	28	92	80	32	60	687	46	27	30	8.0	6.8	3.0
27	619	88	70	32	56	405	46	22	38	7.6	5.7	10
28	1330	88	62	36	47	212	41	18	48	25	5.0	29
29	868	84	54	37	---	176	35	16	292	27	4.7	20
30	304	66	50	39	---	198	30	16	241	15	4.1	15
31	166	---	49	50	---	437	---	160	---	10	4.7	---
TOTAL	4383	3759	1795	2072	4705	9313	4346	1315	5213	763.4	415.1	251.3
MEAN	141	125	57.9	66.8	168	300	145	42.4	174	24.6	13.4	8.38
MAX	1330	447	160	346	408	1200	636	177	1090	102	85	30
MIN	16	39	32	32	47	28	30	16	30	7.6	4.1	3.0
CFSM	2.11	1.87	.87	1.00	2.52	4.49	2.17	.64	2.61	.37	.20	.13
IN.	2.44	2.09	1.00	1.15	2.62	5.19	2.42	.73	2.90	.43	.23	.14

CAL YR 1981 TOTAL 28303.3 MEAN 77.5 MAX 1330 MIN 3.5 CFSM 1.16 IN 15.76
WTR YR 1982 TOTAL 38330.8 MEAN 105 MAX 1330 MIN 3.0 CFSM 1.57 IN 21.35

01528700 DIVERSION FROM WANETA LAKE TO KEUKA LAKE AT KEUKA, NY

LOCATION.--Lat 42°29'06", long 77°06'39", Steuben County Hydrologic Unit 02050105, at entrance to conduit on Diversion Canal, 0.8 mi (1.3 km) east of Keuka, and 1.0 mi (1.6 km) north of Wayne.

DRAINAGE AREA.--45.5 mi² (118 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Daily power generation records.

REMARKS.--Records for March 1931 (when diversion and power generation began) to September 1966 on file. Sketch indicates diversion from Lamoka-Waneta Lakes (Susquehanna River Basin) to Keuka Lake (Oswego River Basin).

COOPERATION.--Records furnished by New York State Electric and Gas Corp.

AVERAGE DISCHARGE.--16 years, 23.8 ft³/s (0.674 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73 ft³/s (2.07 m³/s) June 23, 1972; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 71 ft³/s (2.01 m³/s) Feb. 17; no flow many days.

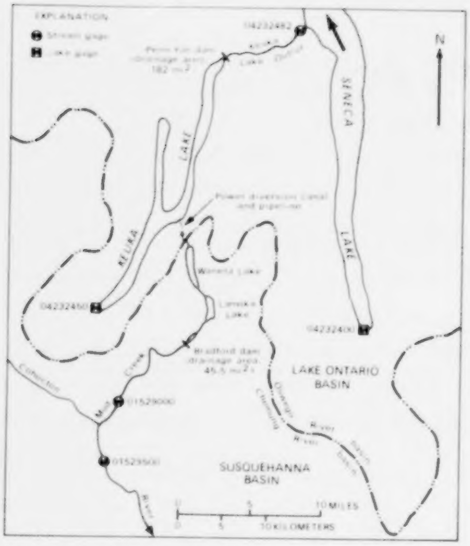

EXPLANATION
Stream gage
Lake gage
04232482
Penn Yan dam (drainage area 182 mi²)
Keuka Lake Outlet
N
SENECA LAKE
KEUKA LAKE
Power diversion canal and pipeline
Waneta Lake
Lamoka Lake
04232450
04232400
Bradford dam (drainage area 45.5 mi²)
Mud Creek
Cohocton
01529000
01529500
River
LAKE ONTARIO BASIN
Chemung River Basin
Oswego River Basin
SUSQUEHANNA BASIN
0 5 10 MILES
0 5 10 KILOMETERS

Figure 8.--Gaging stations and transbasin diversion, Cohocton River-Keuka Lake area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	68	66	.00	.00	39	66	.00	36	65	.00	.00
2	42	68	66	.00	.00	66	66	.00	66	65	.00	.00
3	.00	68	66	.00	.00	66	66	36	66	65	.00	.00
4	.00	68	66	36	22	66	66	66	39	65	.00	.00
5	39	66	66	68	66	39	66	66	.00	65	.00	.00
6	66	66	66	68	18	.00	66	66	33	45	.00	.00
7	66	66	66	68	.00	.00	66	30	65	36	.00	.00
8	66	66	66	42	36	36	66	.00	65	65	.00	.00
9	42	66	66	.00	66	60	31	.00	65	39	.00	.00
10	.00	66	66	.00	66	60	66	.00	65	.00	.00	.00
11	.00	66	36	39	66	60	66	.00	65	.00	.00	.00
12	.00	68	.00	66	66	33	66	.00	65	36	.00	.00
13	39	41	.00	30	66	.00	66	.00	65	65	.00	.00
14	66	.00	39	.00	66	.00	66	.00	65	65	.00	.00
15	66	.00	66	.00	66	39	66	.00	45	65	.00	.00
16	42	32	66	.00	50	66	66	.00	42	35	.00	.00
17	.00	60	66	.00	71	66	66	.00	65	.00	.00	.00
18	.00	68	42	.00	66	66	66	.00	33	.00	.00	.00
19	39	68	.00	.00	42	66	66	.00	61	.00	.00	.00
20	66	66	.00	.00	.00	66	66	.00	61	.00	.00	.00
21	19	66	39	.00	.00	66	66	.00	61	.00	.00	.00
22	32	66	66	.00	39	66	66	.00	61	.00	.00	.00
23	32	66	66	.00	66	66	38	.00	61	.00	.00	.00
24	.00	66	35	.00	66	66	.00	39	61	.00	.00	.00
25	.00	66	.00	.00	66	66	.00	66	39	.00	.00	.00
26	32	66	.00	.00	42	66	36	45	.00	.00	.00	.00
27	60	45	.00	.00	.00	66	66	.00	.00	.00	.00	36
28	47	22	39	.00	.00	66	66	9.1	39	.00	.00	63
29	68	66	66	.00	---	66	66	.00	63	.00	.00	63
30	68	66	66	.00	---	66	39	.00	63	.00	.00	63
31	68	---	36	.00	---	66	---	.00	---	.00	.00	---
TOTAL	1131.00	1732.00	1388.00	417.00	1112.00	1620.00	1728.00	423.10	1515.00	776.00	.00	225.00
MEAN	36.5	57.7	44.8	13.5	39.7	52.3	57.6	13.6	50.5	25.0	.000	7.50
MAX	68	68	66	68	71	66	66	66	66	65	.00	63
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

CAL YR 1981 TOTAL 6480.10 MEAN 17.8 MAX 68 MIN .00
WTR YR 1982 TOTAL 12067.10 MEAN 33.1 MAX 71 MIN .00

01529000 MUD CREEK NEAR SAVONA, NY

LOCATION.--Lat 42°18'29", long 77°11'50", Steuben County, Hydrologic Unit 02050105, on left bank just upstream from small tributary entering from east, 2.4 mi (3.9 km) upstream from Savona, and 3.3 mi (5.3 km) upstream from mouth.

DRAINAGE AREA.--76.6 mi² (198 km²).

PERIOD OF RECORD.--July 1918 to December 1919 (published as "at Savona"), March 1937 to September 1982 (discontinued).

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,049.63 ft (319.927 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to December 1919, nonrecording gage at site 1.5 mi (2.4 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Lake Lamoka-Waneta System. Diversion table for station 01528700 represents discharge from 45.5 mi² (118 km²) of drainage area from the Susquehanna River basin to the St. Lawrence River basin through the Keuka power diversion canal of New York State Electric and Gas Corp. Monthly records of diversion for March 1931 to September 1966 available in files of the Geological Survey.

COOPERATION.--Records of diversion furnished by New York State Electric and Gas Corp.

AVERAGE DISCHARGE.--45 years (water years 1938-82), 42.0 ft³/s (1.19 m³/s) unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,100 ft³/s (173 m³/s) June 23, 1972, gage height, 8.66 ft (2.640 m), from rating curve extended above 1,350 ft³/s (38.2 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.04 ft³/s (0.001 m³/s) Sept. 21-23, 1941, gage height, 0.53 ft (0.162 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 890 ft³/s (25.2 m³/s) Oct. 28, gage height, 5.02 ft (1.530 m); minimum, 2.2 ft³/s (0.062 m³/s) Sept. 9, 18, 19, 20, gage height, 0.65 ft (0.198 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	69	25	24	130	14	177	15	13	99	6.4	3.5
2	18	51	28	33	120	14	100	14	24	40	5.8	3.2
3	12	42	30	20	90	13	84	13	19	26	5.4	3.7
4	9.2	35	27	47	150	12	163	13	15	25	12	3.2
5	7.6	31	25	97	40	12	140	11	65	21	52	3.0
6	9.2	32	23	51	28	12	120	11	329	17	19	3.0
7	18	35	20	50	23	12	100	12	180	14	12	3.0
8	16	29	24	47	21	12	90	28	76	13	8.8	2.8
9	13	24	30	30	19	12	64	44	49	12	12	2.6
10	11	21	25	23	17	12	52	26	34	10	11	2.6
11	9.2	20	21	18	16	13	74	19	28	9.2	8.4	3.0
12	8.0	19	19	15	15	45	73	17	23	8.8	7.2	3.0
13	7.2	17	18	13	14	200	74	17	21	8.0	5.8	3.0
14	6.4	16	17	12	14	491	76	14	19	6.9	5.4	3.0
15	6.4	16	17	12	15	284	57	13	16	7.0	5.1	4.0
16	5.8	105	16	11	32	171	51	12	19	6.1	4.5	3.2
17	5.4	218	15	11	49	169	51	11	154	5.9	4.5	2.8
18	5.4	99	15	10	31	353	51	11	109	7.2	4.5	2.6
19	5.8	65	14	10	25	292	40	11	46	6.6	4.2	2.4
20	5.4	121	13	10	22	270	35	14	31	9.7	4.2	2.4
21	6.1	239	13	9.8	21	341	35	13	25	14	4.2	2.4
22	6.1	177	14	9.4	20	373	30	13	21	9.9	3.5	2.8
23	6.4	109	38	9.4	19	309	26	22	22	7.4	3.5	3.0
24	9.7	68	77	9.2	18	289	26	34	19	6.0	4.2	3.2
25	8.4	48	50	9.0	17	274	24	29	16	5.3	4.0	3.0
26	7.6	40	41	8.8	16	305	21	19	14	4.8	3.7	3.0
27	210	39	29	8.6	13	247	22	16	13	4.8	3.2	8.0
28	810	37	26	8.6	15	172	19	17	14	16	3.2	8.4
29	555	33	26	10	---	153	16	15	120	21	2.8	6.4
30	328	29	24	52	---	150	15	13	277	12	2.8	5.1
31	181	---	25	119	---	190	---	13	---	8.4	3.2	---
TOTAL	2314.8	1884	785	797.8	1010	5216	1906	530	1811	462.0	236.5	105.3
MEAN	74.7	62.8	25.3	25.7	36.1	168	63.5	17.1	60.4	14.9	7.63	3.51
MAX	810	239	77	119	150	491	177	44	329	99	52	8.4
MIN	5.4	16	13	8.6	13	12	15	11	13	4.8	2.8	2.4

CAL YR 1981 TOTAL 15902.3 MEAN 43.6 MAX 810 MIN 2.4
WTR YR 1982 TOTAL 17058.4 MEAN 46.7 MAX 810 MIN 2.4

01529500 COHOCTON RIVER NEAR CAMPBELL, NY

LOCATION.--Lat 42°15'09", long 77°13'01", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on town road at junction with County Highway 125, 1.9 mi (3.1 km) upstream from Michigan Creek, and 2 mi (3 km) north of Campbell.

DRAINAGE AREA.--470 mi^2 (1,217 km^2).

PERIOD OF RECORD.--July 1918 to current year.

REVISED RECORDS.--WSP 891: 1935. WSP 1302: 1919-20(M), 1927-28(M), 1928-38 (monthly runoff). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,016.34 ft (309.780 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 5, 1937, nonrecording gage on highway bridge.

REMARKS.--Records good except those for winter periods, which are fair. During each year since March 1931, a large part of flow from 45.5 mi^2 (118 km^2) of drainage area upstream from Lake Lamoka on Mud Creek, a tributary upstream from this station, is diverted into Keuka Lake (Oswego River basin), for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--64 years, 449 ft^3/s (12.72 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,100 ft^3/s (1,160 m^3/s) July 8, 1935, gage height, 11.6 ft (3.54 m), from floodmark, from rating curve extended above 24,200 ft^3/s (685 m^3/s) on basis of velocity-area and slope-area measurements of peak flow; minimum, 8 ft^3/s (0.23 m^3/s) Sept. 6, 7, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,200 ft^3/s (119 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1330	*7,840	222	*6.91	2.106
Mar. 13	2400	5,980	169	5.95	1.814
June 6	0530	4,350	123	4.97	1.515

Minimum discharge, 54 ft^3/s (1.53 m^3/s) Sept. 14, gage height, 0.12 ft (0.037 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	916	467	300	680	220	2630	272	346	787	146	75
2	389	752	477	340	640	210	1640	260	557	513	127	81
3	345	634	486	380	680	190	1380	248	388	419	123	94
4	364	558	449	460	860	180	1610	237	288	379	124	91
5	305	502	424	2000	700	170	1180	226	785	328	365	81
6	301	548	397	820	580	160	1040	216	3480	280	240	74
7	466	550	375	779	500	150	914	216	2130	248	170	72
8	573	493	400	540	380	150	868	450	1220	233	155	67
9	524	447	460	400	330	140	792	822	764	209	237	65
10	445	410	370	320	290	150	785	487	578	189	196	61
11	393	379	340	290	250	200	1020	378	498	174	166	61
12	359	354	320	270	230	400	986	332	412	177	139	60
13	318	325	290	260	220	2100	1150	310	375	162	127	59
14	292	317	270	250	210	3000	1210	280	364	150	119	56
15	268	311	250	240	230	2000	986	252	323	189	109	119
16	248	1670	240	230	1000	1300	914	233	363	156	104	214
17	230	1680	220	220	1100	1200	930	219	1540	142	98	157
18	219	1230	200	210	800	1700	868	206	820	153	111	119
19	216	995	180	200	640	1680	713	202	520	145	94	94
20	212	1870	170	190	540	1650	619	226	434	226	96	81
21	199	1600	160	190	480	2450	584	206	369	252	105	75
22	186	1260	150	190	430	2670	519	216	332	171	100	72
23	196	1010	200	180	410	2250	471	404	337	145	93	73
24	256	840	900	180	340	2290	435	425	313	127	90	72
25	223	728	640	170	310	2520	409	323	264	115	88	70
26	209	644	540	170	280	3060	388	260	243	106	87	66
27	1990	650	470	160	260	2150	373	226	237	101	84	117
28	5920	612	430	160	260	1460	346	212	355	456	79	175
29	3690	555	400	150	---	1260	310	216	1520	398	74	137
30	1880	500	370	150	---	1220	288	202	1510	217	72	112
31	1220	---	330	160	---	1780	---	297	---	168	68	---
TOTAL	22624	23340	11375	10559	13630	40060	26358	9059	21665	7515	3986	2750
MEAN	730	778	367	341	487	1292	879	292	722	242	129	91.7
MAX	5920	1870	900	2000	1100	3060	2630	822	3480	787	365	214
MIN	186	311	150	150	210	140	288	202	237	101	68	56

CAL YR 1981 TOTAL 162307 MEAN 445 MAX 5920 MIN 69
WTR YR 1982 TOTAL 192921 MEAN 529 MAX 5920 MIN 56

01529950 CHEMUNG RIVER AT CORNING, NY

LOCATION.--Lat 42°08'47", long 77°03'28", Steuben County, Hydrologic Unit 02050105, on right bank adjacent to Corning Glass Works power plant, 0.2 mi (0.3 km) upstream from bridge on State Highway 414 (Centerway) at Corning, and 1.7 mi (2.7 km) downstream from Cohocton River.

DRAINAGE AREA.--2,006 mi² (5,196 km²).

PERIOD OF RECORD.--Occasional discharge measurements water years 1941, 1968-69. October 1974 to current year.

REVISED RECORDS.--WRD NY-78-1: 1976, 1977(m).

GAGE.--Water-stage recorder. Datum of gage is 900.00 ft (274.320 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. High flows slightly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi² (118 km²) of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--8 years, 2,229 ft³/s (63.10 m³/s), 15.09 in/yr (383 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 127,000 ft³/s (3,600 m³/s) Sept. 26, 1975, gage height, 32.46 ft (9.894 m); minimum, 102 ft³/s (2.89 m³/s) Oct. 3, 1980, gage height, 14.22 ft (4.334 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of 40.71 ft (12.408 m), from floodmark (discharge 228,000 ft³/s or 6,460 m³/s), from peak flows determined at upstream and downstream stations adjusted for drainage area and channel storage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,000 ft³/s (623 m³/s) Oct. 28 at 1000 hours, gage height, 22.52 ft (6.864 m), no peak above base of 24,000 ft³/s (680 m³/s); minimum, 175 ft³/s (4.96 m³/s) Sept. 13, 14, 15, gage height, 14.38 ft (4.383 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	415	3060	1270	980	2900	900	12200	756	1370	3780	564	215
2	1060	2250	1230	1100	4300	880	7800	670	2110	2280	485	226
3	1100	1970	1320	1300	6600	860	5840	650	2020	1710	431	226
4	936	2500	1340	1900	4700	800	7610	629	1990	1480	574	239
5	767	1660	1250	7020	3200	760	4930	585	7450	1330	1040	239
6	723	1570	1120	3200	2400	740	4110	523	18700	1130	681	233
7	1060	1850	1000	2500	1800	700	3190	476	15100	936	504	215
8	1610	1540	1030	1800	1500	640	3100	554	13700	824	440	215
9	1570	1320	1360	1400	1300	600	3120	2140	11900	756	564	199
10	1100	1140	1210	1100	1200	640	2770	1540	8630	640	574	194
11	923	1000	1160	1000	1000	812	3800	1070	4350	554	514	184
12	836	897	1040	960	900	2670	3900	897	2810	543	431	179
13	723	836	989	1000	800	10200	4110	936	2210	533	431	179
14	650	767	885	1000	760	14300	4620	836	1930	504	345	175
15	618	745	848	960	900	12100	3780	745	1650	533	323	179
16	574	4550	820	920	2450	8810	3170	734	1520	564	310	323
17	533	6540	800	880	4700	6900	3120	670	11200	494	303	290
18	523	3900	720	820	2620	6750	3830	660	6040	449	316	253
19	485	3280	660	700	1830	6370	3280	618	3480	467	290	215
20	485	5500	600	680	1400	6510	2520	701	2340	564	282	199
21	467	5780	740	640	1300	9180	2160	670	1920	1580	303	596
22	449	3970	1120	620	1300	10600	1990	607	1650	860	296	778
23	449	3040	1810	600	1200	8270	1710	1570	1510	618	290	640
24	554	2500	5120	580	1100	8210	1540	2560	1420	494	282	543
25	585	2200	2750	580	1100	8840	1370	2690	1250	375	275	564
26	543	1970	2040	560	1000	12500	1250	1600	949	316	267	523
27	5310	1790	1790	580	940	9780	1160	1210	812	323	253	723
28	18800	1880	1500	540	900	5580	1070	1180	885	2130	239	860
29	12600	1650	1400	500	---	4370	936	2210	5550	2410	233	574
30	7540	1460	1300	490	---	4110	812	1850	9620	1090	226	440
31	4330	---	1100	500	---	5950	---	1370	---	691	215	---
TOTAL	68318	73115	41322	37410	56100	170332	104798	33907	146066	30958	12281	10618
MEAN	2204	2437	1333	1207	2004	5495	3493	1094	4869	999	396	354
MAX	18800	6540	5120	7020	6600	14300	12200	2690	18700	3780	1040	860
MIN	415	745	600	490	760	600	812	476	812	316	215	175

CAL YR 1981 TOTAL 617211 MEAN 1691 MAX 18800 MIN 190
WTR YR 1982 TOTAL 785225 MEAN 2151 MAX 18800 MIN 175

01530500 NEWTOWN CREEK AT ELMIRA, NY

LOCATION.--Lat 42°06'16", long 76°47'54", Chemung County, Hydrologic Unit 02050105, on left bank 200 ft (61 m) downstream from bridge on Linden Place in Elmira, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--77.5 mi^2 (201 km^2).

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 1502: 1956. WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 838.35 ft (255.529 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Diurnal fluctuation at low flow caused by operations of sand and gravel plant and wastewater treatment plant upstream.

AVERAGE DISCHARGE.--44 years, 87.3 ft^3/s (2.472 m^3/s), 15.30 in/yr (389 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,000 ft^3/s (113 m^3/s) June 23, 1972 (backwater from Chemung River); maximum gage height, 19.28 ft (5.877 m) June 23, 1972, from floodmarks (backwater from Chemung River); minimum daily, 3.5 ft^3/s (0.10 m^3/s) Oct. 6, 7, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	0945	*3,110	88.1	*15.56	4.743	June 6	0415	1,430	40.5	10.78	3.286
Nov. 16	1515	1,350	38.2	10.50	3.200	June 17	1000	1,350	38.2	10.52	3.206
Mar. 13	2045	1,600	45.3	11.02	3.359						

Minimum discharge, 7.5 ft^3/s (0.21 m^3/s) Sept. 21; minimum gage height, 4.83 ft (1.472 m) Aug. 22-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	127	58	56	60	28	342	34	36	83	23	10
2	53	106	65	70	120	26	165	32	74	58	21	11
3	75	90	76	57	220	25	234	31	51	50	21	11
4	63	79	66	228	412	23	313	29	103	46	36	11
5	43	71	61	240	198	23	141	28	315	43	77	10
6	67	87	56	113	94	22	124	27	931	36	37	10
7	107	87	53	111	72	22	111	27	315	32	28	10
8	71	79	65	79	54	21	99	34	167	28	25	10
9	61	79	74	67	46	21	95	61	111	27	26	9.5
10	49	71	63	50	39	21	108	40	79	24	23	9.1
11	42	65	56	46	35	53	153	33	71	23	22	9.5
12	36	59	55	43	32	246	130	31	57	23	20	9.5
13	32	55	53	40	30	814	132	29	51	22	19	9.5
14	30	53	50	38	29	750	122	27	47	22	18	10
15	29	55	49	35	27	432	95	24	40	23	17	11
16	26	811	48	32	126	272	84	23	92	20	17	11
17	25	384	45	30	109	299	208	24	776	19	17	12
18	25	242	42	28	64	265	322	23	234	19	17	11
19	29	170	39	27	54	250	141	24	132	19	17	10
20	28	255	38	26	49	276	105	34	95	24	17	9.1
21	25	174	36	23	45	389	99	28	76	23	17	8.7
22	24	130	35	22	42	349	78	27	64	21	14	8.3
23	24	111	297	22	39	276	66	43	64	20	14	14
24	26	98	218	21	37	279	57	54	53	19	14	12
25	25	87	120	20	35	299	51	45	45	18	12	9.5
26	26	78	80	20	33	508	48	36	39	17	11	8.7
27	333	79	68	19	31	257	48	31	36	20	11	16
28	1860	72	58	19	30	155	44	38	35	94	11	13
29	566	65	54	19	---	116	39	74	208	58	11	9.5
30	265	60	49	18	---	111	36	48	165	34	11	8.7
31	169	---	47	18	---	196	---	39	---	27	10	---
TOTAL	4266	3979	2174	1637	2162	6824	3790	1078	4562	992	634	312.6
MEAN	138	133	70.1	52.8	77.2	220	126	34.8	152	32.0	20.5	10.4
MAX	1860	811	297	240	412	814	342	74	931	94	77	16
MIN	24	53	35	18	27	21	36	23	35	17	10	8.3
CFSM	1.78	1.72	.91	.68	1.00	2.84	1.63	.45	1.96	.41	.27	.13
IN.	2.05	1.91	1.04	.79	1.04	3.28	1.82	.52	2.19	.48	.30	.15

CAL YR 1981 TOTAL 25768.4 MEAN 70.6 MAX 1860 MIN 8.2 CFSM .91 IN 12.37
WTR YR 1982 TOTAL 32410.6 MEAN 88.8 MAX 1860 MIN 8.3 CFSM 1.15 IN 15.56

01531000 CHEMUNG RIVER AT CHEMUNG, NY

LOCATION.--Lat 42°00'08", long 76°38'06", Chemung County, Hydrologic Unit 02050105, on right bank 100 ft (30 m) upstream from bridge on State Highway 427, 0.7 mi (1.1 km) southwest of Chemung, and 10.0 mi (16.1 km) upstream from mouth.

DRAINAGE AREA.--2,506 mi^2 (6,491 km^2).

PERIOD OF RECORD.--September 1903 to current year (gage heights only for some winter periods).

REVISED RECORDS.--WSP 891: 1935-39. WSP 1432: 1904, 1907, 1915. WSP 2103: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 778.63 ft (237.326 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 10, 1930, nonrecording gage on highway bridge 60 ft (18 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. High flows slightly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi^2 (118 km^2) of drainage area is diverted from Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--76 years (water years 1906-13, 1915-82), 2,537 ft^3/s (71.85 m^3/s), 13.75 in/yr (349 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft^3/s (5,350 m^3/s) June 23, 1972, gage height, 31.62 ft (9.638 m), from floodmark, from rating curve extended above 65,000 ft^3/s (1,840 m^3/s) on basis of slope-area and velocity-area studies at gage height 19.57 ft (5.965 m) and slope-area and contracted opening measurements at gage heights 23.97 (7.306 m) and 31.62 ft (9.638 m); minimum, 49 ft^3/s (1.39 m^3/s) Aug. 14, 1911, gage height, 1.47 ft (0.448 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30,000 ft^3/s (850 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	2000	34,200	968	13.99	4.264
June 6	1200	*36,000	1,020	*14.26	4.346

Minimum discharge, 264 ft^3/s (7.476 m^3/s) Sept. 14, 15, 16, gage height, 3.26 ft (0.994 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	551	3960	1840	1600	2600	980	15400	1130	2050	5140	788	343
2	743	2890	1740	1500	3400	960	10600	1120	2830	3020	699	337
3	1540	2430	1870	1400	4600	940	7240	1050	3390	2200	647	350
4	1300	2750	1920	2200	7000	900	9340	1010	3370	1820	590	343
5	1110	2100	1840	8160	5400	900	6600	980	6120	1650	1670	350
6	990	1900	1700	5010	3000	900	5200	940	31800	1430	1120	350
7	1240	2120	1550	4000	2100	900	4380	881	21000	1250	834	337
8	1590	1980	1580	2800	1900	880	4020	920	18200	1100	690	324
9	2190	1650	2030	1900	1700	881	4110	2170	15000	1000	681	318
10	1580	1450	1980	1500	1500	834	3760	2430	11800	930	779	312
11	1290	1290	1650	1200	1200	930	4600	1700	5530	825	725	293
12	1130	1170	1680	1200	1100	2810	4910	1410	3920	769	647	287
13	1020	1080	1640	1100	980	11800	4990	1300	2920	734	606	281
14	907	1000	1520	1100	960	22700	5460	1210	2540	725	566	269
15	839	980	1460	1000	1000	17500	4850	1110	2180	760	506	269
16	799	4420	1430	980	2220	12400	4060	1060	2000	751	473	269
17	763	10300	1400	960	4890	8380	3920	1080	12900	742	465	401
18	718	5660	1300	920	3350	8510	5060	1040	10000	664	448	372
19	704	4600	1000	880	2240	7450	4400	990	4910	647	448	343
20	677	5160	980	840	1700	7390	3560	1070	3370	834	425	312
21	662	8030	1000	800	1500	10500	3060	1140	2650	1390	417	299
22	635	5180	1290	780	1400	14400	2810	1110	2250	1410	425	716
23	626	4170	2080	760	1300	10900	2450	1740	2120	891	425	815
24	635	3470	6070	740	1200	9850	2200	3370	1900	760	425	690
25	744	3060	4340	720	1200	10800	1970	3800	1680	656	417	639
26	761	2690	3020	720	1100	15500	1820	2590	1420	558	401	631
27	2560	2430	2560	700	1100	15000	1700	1920	1190	506	386	707
28	25500	2480	2390	680	1000	7750	1590	1710	1130	950	372	862
29	20000	2270	2290	660	---	5570	1450	3180	2750	3310	350	834
30	10900	2050	2120	640	---	4930	1300	2980	13700	1580	343	598
31	5570	---	1730	640	---	5680	---	2240	---	990	343	---
TOTAL	90274	94720	61000	48090	62640	219825	136810	50431	196620	39992	18111	13251
MEAN	2912	3157	1968	1551	2237	7091	4560	1627	6554	1290	584	442
MAX	25500	10300	6070	8160	7000	22700	15400	3800	31800	5140	1670	862
MIN	551	980	980	640	960	834	1300	881	1130	506	343	269
CFSM	1.16	1.26	.79	.62	.89	2.83	1.82	.65	2.62	.52	.23	.18
IN.	1.34	1.41	.91	.71	.93	3.26	2.03	.75	2.92	.59	.27	.20

CAL YR 1981 TOTAL 826947 MEAN 2266 MAX 25500 MIN 320 CFSM .90 IN 12.28
WTR YR 1982 TOTAL 1031764 MEAN 2827 MAX 31800 MIN 269 CFSM 1.13 IN 15.32

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN

01499500 EAST SIDNEY LAKE AT EAST SIDNEY, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01511000 WHITNEY POINT LAKE AT WHITNEY POINT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01521000 ARKPORT RESERVOIR NEAR ARKPORT, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

01523000 ALMOND LAKE NEAR ALMOND, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

DIVERSION OF WATER AFFECTING THE SUSQUEHANNA RIVER BASIN

01528700 Diversion from Waneta Lake to Keuka Lake at Keuka, NY (see station for daily discharge).

03011020 ALLEGHENY RIVER AT SALAMANCA, NY

LOCATION.--Lat 42°09'23", long 78°42'56", Cattaraugus County, Hydrologic Unit 05010001, on left bank 230 ft (70 m) upstream from Main Street bridge in Salamanca, 1.3 mi (2.1 km) downstream from Great Valley Creek, and 1.6 mi (2.6 km) upstream from Little Valley Creek.

DRAINAGE AREA.--1,608 mi^2 (4,165 km^2).

PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1964, published as "at Red House."

REVISED RECORDS.--WSP 1385: 1907, 1090-12, 1913(M), 1914-15, 1916-17(M), 1925, 1927. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,358.00 ft (413.918 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Sept. 3, 1917, nonrecording gage and Sept. 4, 1917 to Sept. 30, 1964, water-stage recorder at site 7.5 mi (12.1 km) downstream at different datum. Oct.1, 1964 to Sept. 30, 1967, at present site at datum 0.04 ft (0.012 m) lower.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--79 years, 2,786 ft^3/s (78.90 m^3/s), 23.53 in/yr (598 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,000 ft^3/s (2,070 m^3/s) June 23, 1972, gage height, 24.01 ft (7.318 m) from floodmarks; minimum daily, 79 ft^3/s (2.24 m^3/s) Sept. 10, 11, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,400 ft^3 (549 m^3/s) Oct. 28 at 2000 hours, gage height, 10.72 ft (3.267 m), no other peak above base of 17,000 ft^3/s (481 m^3/s); minimum, 202 ft^3/s (5.72 m3/s) Sept. 13-16, gage height, 2.82 ft (0.860 m).

DISCHARGE, IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	7990	2450	2060	3900	1400	14400	1340	3920	6700	548	300
2	4750	5110	2510	2140	4100	1300	12200	1280	4270	4100	508	277
3	4270	3850	2570	2010	4200	1200	11400	1220	3460	2880	499	315
4	3120	3190	2410	2880	4100	1100	12000	1140	2730	2490	611	389
5	2350	2750	2250	6310	3600	1000	10100	1070	3530	2100	855	355
6	2210	3510	2100	5180	3100	1000	8970	1010	11100	1710	643	307
7	3920	4950	1930	4510	2800	1000	7040	972	10800	1450	518	277
8	4800	4200	2120	3700	2400	1000	5520	1240	9180	1390	470	256
9	4100	3680	2510	3060	2100	1100	4950	3300	7120	1330	558	242
10	3140	3260	2190	2530	1900	1200	4430	3350	4830	1100	868	235
11	2550	2950	1970	2200	1800	1900	4300	2770	3800	985	699	222
12	2140	2710	1920	1900	1700	3680	3970	2470	3030	1100	528	222
13	1790	2430	1760	1800	1500	6080	4070	2190	2630	1030	460	215
14	1560	2170	1660	1700	1500	13400	4560	1950	2290	868	433	202
15	1390	2010	1590	1600	1400	12100	4220	1680	1970	781	397	202
16	1250	4020	1540	1600	1600	10300	4220	1480	2230	711	372	235
17	1150	5110	1480	1500	2600	10900	4560	1330	7820	665	363	270
18	1100	4670	1390	1500	2700	10000	4670	1210	7880	677	406	263
19	1310	4330	1150	1400	2500	9720	3950	1120	5110	1220	397	249
20	1590	7360	1140	1400	2400	8660	3280	1370	3850	1480	415	228
21	1400	8550	1220	1300	2200	9380	3010	1430	3080	1500	528	222
22	1400	6460	1330	1200	2100	10500	2730	1480	2570	1100	479	460
23	1540	5250	3510	1200	2000	9360	2370	3140	2250	818	424	932
24	2060	4400	6540	1100	1800	9280	2140	3850	2010	711	372	855
25	1900	3730	4750	1000	1800	9720	1950	3530	1640	632	355	579
26	1710	3210	3630	980	1700	10800	1830	3030	1420	579	347	433
27	2950	3370	3170	940	1600	10600	1850	2570	1280	538	339	665
28	16500	3580	2860	940	1500	9460	1760	2770	1220	893	315	1150
29	17500	3100	2570	980	---	8040	1560	5980	3870	1330	292	919
30	16200	2670	2250	1300	---	6520	1430	4590	8270	830	277	654
31	12500	---	1920	3000	---	8800	---	4690	---	643	270	---
TOTAL	125830	124570	72390	64920	66600	200500	153440	70552	129160	44341	14546	12130
MEAN	4059	4152	2335	2094	2379	6468	5115	2276	4305	1430	469	404
MAX	17500	8550	6540	6310	4200	13400	14400	5980	11100	6700	868	1150
MIN	1100	2010	1140	940	1400	1000	1430	972	1220	538	270	202
CFSM	2.52	2.58	1.45	1.30	1.48	4.02	3.18	1.42	2.68	.89	.29	.25
IN.	2.91	2.88	1.67	1.50	1.54	4.64	3.55	1.63	2.99	1.03	.34	.28

CAL YR 1981 TOTAL 1052258 MEAN 2883 MAX 26200 MIN 298 CFSM 1.79 IN 24.34
WTR YR 1982 TOTAL 1078979 MEAN 2956 MAX 17500 MIN 202 CFSM 1.84 IN 24.96

03013000 CONEWANGO CREEK AT WATERBORO, N.Y.

LOCATION.--Lat 42°10'15", long 79°04'10", Chautauqua County, Hydrologic Unit 05010002, on right bank 300 ft (91 m) downstream from bridge on State Highway 394 at Waterboro, 0.2 mi (0.3 km) downstream from Davis Brook, 0.4 mi (0.6 km) upstream from Harris Brook, and 1.9 mi (3.1 km) northeast of Kennedy.

DRAINAGE AREA.--290 mi^2 (751 km^2).

PERIOD OF RECORD.--September 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,255.30 ft (382.615 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Nov. 7, 1939, nonrecording gages at site 1,300 ft (396 m) upstream at various datums. Nov. 7, 1939 to Nov. 4, 1940, nonrecording gage at site 1,100 ft (335 m) upstream at datum 0.79 ft (0.241 m) higher, and Nov. 5, 1940 to May 28, 1948, nonrecording gage at site 700 ft (213 m) downstream at present datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--44 years, 531 ft^3/s (15.04 m^3/s), 24.87 in/yr (632 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft^3/s (244 m^3/s) Apr. 7, 1947; maximum gage height, 12.13 ft (3.697 m) Feb. 22, 1981; minimum discharge observed, 22 ft^3/s (0.62 m^3/s) Aug. 18, 1940, Sept. 27, 29, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft^3/s (65.1 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 19	1800	*3,930	111	*10.13	3.088
Apr. 4	0100	2,640	74.8	8.64	2.633

Minimum discharge, 64 ft^3/s (1.81 m^3/s) Sept. 21, gage height, 2.80 ft (0.853 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	865	547	873	507	696	290	2200	262	420	328	186	84
2	1630	414	1030	582	895	290	2490	253	347	240	145	91
3	1810	344	972	547	891	240	2600	242	281	196	127	357
4	1790	305	809	822	927	270	2610	229	227	186	115	435
5	1560	283	669	1610	865	290	2360	210	561	178	347	300
6	1220	414	582	1510	768	260	2040	196	1590	162	357	188
7	1170	918	520	1370	673	290	1610	182	1660	151	328	138
8	963	1010	677	1060	557	250	1400	208	1470	200	326	113
9	724	869	882	740	491	240	1240	288	1040	171	459	96
10	514	666	780	450	441	220	1090	255	607	140	500	91
11	399	520	685	440	405	290	1040	212	396	130	456	86
12	336	444	617	430	371	940	1010	192	310	190	394	82
13	288	391	571	460	347	1670	1170	180	257	164	167	78
14	262	360	537	478	331	2440	1380	173	497	130	109	75
15	248	339	517	440	328	2780	1390	164	408	121	99	75
16	244	520	497	410	438	2930	1280	157	456	113	96	72
17	229	865	475	390	603	3350	1210	150	1150	107	92	73
18	235	1150	444	370	585	3750	1110	146	959	106	92	70
19	295	1280	411	371	534	3900	847	150	628	124	91	70
20	426	1470	402	355	491	3820	625	169	447	293	99	68
21	382	1590	417	339	472	3610	537	167	399	271	124	66
22	320	1580	417	328	447	3450	462	177	379	166	115	82
23	379	1430	1040	313	423	3210	402	255	339	124	103	196
24	554	1210	1680	310	411	2960	366	300	283	106	98	244
25	534	972	1750	305	330	2750	341	290	240	99	95	190
26	491	752	1560	295	300	2490	326	233	208	96	95	145
27	728	1140	1220	288	320	2130	320	190	194	91	91	253
28	1210	1430	904	283	290	1690	310	260	188	728	88	417
29	1190	1350	669	274	---	1400	293	949	336	822	87	318
30	1030	1090	544	286	---	1280	276	748	426	537	86	242
31	793	---	478	414	---	1690	---	554	---	300	84	---
TOTAL	22819	25653	23629	16777	14630	55170	34335	8141	16703	6770	5651	4795
MEAN	736	855	762	541	523	1780	1145	263	557	218	182	160
MAX	1810	1590	1750	1610	927	3900	2610	949	1660	822	500	435
MIN	229	283	402	274	290	220	276	146	188	91	84	66
CFSM	2.54	2.95	2.63	1.87	1.80	6.14	3.95	.91	1.92	.75	.63	.55
IN.	2.93	3.29	3.03	2.15	1.88	7.08	4.40	1.04	2.14	.87	.72	.62

CAL YR 1981 TOTAL 229176 MEAN 628 MAX 7720 MIN 61 CFSM 2.17 IN 29.40
WTR YR 1982 TOTAL 235073 MEAN 644 MAX 3900 MIN 66 CFSM 2.22 IN 30.15

03013946 CHAUTAUQUA LAKE AT BEMUS POINT, NY

LOCATION.--Lat 42°09'23", long 79°23'39", Chautauqua County, Hydrologic Unit 05010002, 6 ft (1.8 m) east of lake shore, 30 ft (9.1 m) south of the intersection of Pauline Avenue and Lakeside Avenue, and 950 ft (290 m) southeast of the ferry landing, at Bemus Point.

DRAINAGE AREA.--189 mi² (490 km²).

PERIOD OF RECORD.--October 1972 to September 1973; November 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Nov. 1974 at site 950 ft (290 m) northwest at same datum.

REMARKS.--Lake regulated for flood control by Warner Dam. Area of water surface, 20.98 mi² (54.34 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft (399.663 m) Mar. 5, 1976; minimum, 1,306.35 ft (398.175 m) Mar. 11, 12, 13, 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,309.14 ft (399.026 m) Apr. 1; minimum, 1,306.70 ft (398.282 m) Mar. 10, 11.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1308.32	1308.12	1307.84	1307.71	1307.32	1306.90	1309.11	1307.87	1308.29	1308.30	1308.27	1308.01
2	1308.64	1308.04	1307.88	1307.68	1307.43	1306.87	1309.09	1307.87	1308.29	1308.24	1308.25	1308.02
3	1308.69	1307.97	1307.87	1307.65	1307.49	1306.85	1309.07	1307.87	1308.29	1308.24	1308.24	1308.08
4	1308.62	1307.90	1307.83	1307.72	1307.54	1306.83	1309.07	1307.87	1308.28	1308.25	1308.22	1308.08
5	1308.53	1307.83	1307.80	1307.92	1307.55	1306.83	1309.04	1307.86	1308.38	1308.24	1308.22	1308.06
6	1308.47	1307.85	1307.74	1307.93	1307.53	1306.80	1309.01	1307.86	1308.57	1308.24	1308.21	1308.06
7	1308.44	1307.92	1307.68	1307.93	1307.50	1306.79	1308.93	1307.85	1308.54	1308.26	1308.20	1308.05
8	1308.36	1307.90	1307.73	1307.90	1307.46	1306.76	1308.85	1307.90	1308.45	1308.37	1308.25	1308.04
9	1308.27	1307.86	1307.81	1307.89	1307.44	1306.74	1308.76	1307.92	1308.36	1308.33	1308.32	1308.03
10	1308.19	1307.80	1307.81	1307.88	1307.40	1306.72	1308.69	1307.92	1308.27	1308.26	1308.31	1308.01
11	1308.11	1307.74	1307.80	1307.83	1307.35	1306.74	1308.64	1307.91	1308.23	1308.23	1308.29	1308.00
12	1308.08	1307.68	1307.76	1307.81	1307.31	1306.89	1308.59	1307.92	1308.22	1308.27	1308.25	1307.99
13	1308.05	1307.62	1307.71	1307.77	1307.26	1307.18	1308.60	1307.92	1308.22	1308.27	1308.22	1307.98
14	1308.03	1307.56	1307.67	1307.72	1307.22	1307.64	1308.63	1307.92	1308.22	1308.26	1308.20	1307.97
15	1308.01	1307.50	1307.63	1307.67	1307.19	1307.82	1308.58	1307.91	1308.21	1308.25	1308.19	1307.97
16	1307.98	1307.48	1307.60	1307.63	1307.17	1307.95	1308.51	1307.90	1308.29	1308.24	1308.18	1307.95
17	1307.95	1307.49	1307.58	1307.58	1307.18	1308.23	1308.45	1307.90	1308.38	1308.23	1308.17	1307.93
18	1307.96	1307.58	1307.55	1307.53	1307.16	1308.39	1308.39	1307.89	1308.33	1308.23	1308.15	1307.91
19	1308.02	1307.59	1307.52	1307.48	1307.17	1308.46	1308.31	1307.91	1308.26	1308.27	1308.13	1307.90
20	1308.05	1307.69	1307.50	1307.43	1307.15	1308.47	1308.23	1307.96	1308.20	1308.36	1308.15	1307.88
21	1308.09	1307.80	1307.46	1307.39	1307.14	1308.57	1308.16	1307.97	1308.21	1308.35	1308.16	1307.87
22	1308.05	1307.84	1307.45	1307.33	1307.11	1308.67	1308.08	1308.02	1308.23	1308.32	1308.14	1307.94
23	1308.09	1307.85	1307.65	1307.32	1307.08	1308.67	1308.00	1308.10	1308.24	1308.28	1308.12	1308.00
24	1308.16	1307.81	1307.84	1307.29	1307.06	1308.68	1307.96	1308.15	1308.23	1308.23	1308.11	1308.00
25	1308.15	1307.77	1307.87	1307.25	1307.04	1308.70	1307.95	1308.16	1308.22	1308.19	1308.10	1307.99
26	1308.18	1307.73	1307.86	1307.21	1307.00	1308.71	1307.95	1308.17	1308.22	1308.17	1308.09	1307.99
27	1308.25	1307.82	1307.83	1307.16	1306.97	1308.66	1307.94	1308.17	1308.22	1308.16	1308.05	1308.08
28	1308.35	1307.91	1307.84	1307.11	1306.94	1308.59	1307.93	1308.20	1308.23	1308.44	1308.05	1308.11
29	1308.34	1307.90	1307.84	1307.07	---	1308.51	1307.91	1308.25	1308.36	1308.50	1308.03	1308.12
30	1308.27	1307.86	1307.79	1307.07	---	1308.47	1307.89	1308.27	1308.36	1308.38	1308.02	1308.12
31	1308.20	---	1307.74	1307.15	---	1308.79	---	1308.28	---	1308.29	1308.01	---
MEAN	1308.22	1307.76	1307.72	1307.55	1307.26	1307.77	1308.48	1307.99	1308.29	1308.28	1308.17	1308.00
MAX	1308.69	1308.12	1307.88	1307.93	1307.55	1308.79	1309.11	1308.28	1308.57	1308.50	1308.32	1308.12
MIN	1307.95	1307.48	1307.45	1307.07	1306.94	1306.72	1307.89	1307.85	1308.20	1308.16	1308.01	1307.87

CAL YR 1981 MEAN 1308.01 MAX 1309.99 MIN 1305.73
WTR YR 1982 MEAN 1307.96 MAX 1309.11 MIN 1306.72

03014500 CHADAKOIN RIVER AT FALCONER, NY

LOCATION.--Lat 42°06'45", long 79°12'15", Chautauqua County, Hydrologic Unit 05010002, on left bank 10 ft (3 m) downstream from South Dow Street Bridge in Falconer, 1.8 mi (2.9 km) upstream from mouth, and 6 mi (10 km) downstream from Chautauqua Lake.

DRAINAGE AREA.--194 mi² (502 km²).

PERIOD OF RECORD.--November 1934 to current year.

REVISED RECORDS.--WSP 803: 1936(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,256.41 ft (382.954 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Chautauqua Lake. Diurnal fluctuation caused by mills upstream from station. Monthly figures for 1951-66 water years adjusted for regulation.

AVERAGE DISCHARGE.--47 years (water years 1936-82), 350 ft³/s (9.912 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft³/s (63.7 m³/s) Sept. 14, 1979, gage height, 4.93 ft (1.503 m); minimum, 2.7 ft³/s (0.076 m³/s) Nov. 20, 21, 1960, gage height, 0.15 ft (0.046 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Nov. 20, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft³/s (33.7 m³/s) Apr. 1, gage height, 3.20 ft (0.975 m); minimum, 19 ft³/s (0.54 m³/s) July 31, gage height, 0.39 ft (0.119 m) result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	709	609	609	479	387	1140	134	65	454	110	53
2	909	699	650	592	484	382	1110	86	63	210	110	60
3	919	668	656	581	531	373	1100	86	62	65	110	53
4	874	632	644	540	564	364	1110	86	60	63	81	50
5	845	621	656	520	537	373	1020	86	321	63	56	50
6	859	690	638	580	526	359	1070	88	784	63	56	49
7	909	704	598	580	499	364	1050	88	874	69	55	49
8	794	650	644	600	515	351	1020	96	840	142	99	49
9	749	644	650	620	510	346	980	88	815	484	156	62
10	714	598	609	600	499	338	955	104	553	459	153	73
11	479	592	598	560	489	364	940	53	162	73	153	71
12	242	564	598	560	484	387	914	58	63	67	150	71
13	198	547	592	575	479	484	924	62	65	63	134	71
14	238	531	586	575	469	598	934	58	63	63	62	71
15	242	521	581	575	469	662	904	56	63	63	62	71
16	242	531	575	540	469	709	874	56	206	62	62	71
17	183	531	558	500	459	804	889	56	615	63	60	71
18	83	558	542	531	454	845	904	56	603	73	60	71
19	88	542	526	521	459	859	815	73	603	69	60	65
20	131	581	515	521	454	855	774	107	373	145	73	65
21	162	609	489	510	454	899	769	63	77	242	60	67
22	162	603	510	489	444	945	695	71	71	238	60	75
23	169	586	592	484	434	950	537	67	71	238	60	67
24	254	581	575	484	424	955	263	73	71	238	58	63
25	387	575	575	469	419	965	187	63	69	179	56	62
26	469	564	570	469	410	980	183	63	67	60	55	63
27	650	603	537	449	405	965	183	63	67	60	55	96
28	714	621	284	444	391	924	183	86	96	547	55	69
29	739	609	570	429	---	894	179	67	250	889	53	63
30	749	609	592	429	---	879	172	65	469	835	53	63
31	719	---	603	449	---	1030	---	63	---	308	53	---
TOTAL	15464	18073	17922	16385	13210	20590	22778	2321	8561	6647	2480	1934
MEAN	499	602	578	529	472	664	759	74.9	285	214	80.0	64.5
MAX	919	709	656	620	564	1030	1140	134	874	889	156	96
MIN	83	521	284	429	391	338	172	53	60	60	53	49

CAL YR 1981 TOTAL 155318 MEAN 426 MAX 1520 MIN 43
WTR YR 1982 TOTAL 146365 MEAN 401 MAX 1140 MIN 49

LAKES IN ALLEGHENY RIVER BASIN

03013946 Chautauqua Lake at Bemus Point, NY (see station for daily mean elevation).

04213500 CATTARAUGUS CREEK AT GOWANDA, NY

(National stream-quality accounting network station)

LOCATION.--Lat 42°27'50", long 78°56'07", Erie County, Hydrologic Unit 04120102, on right bank 380 ft (116 m) downstream from bridge on State Highways 39 and 62 at Gowanda, 4.2 mi (6.8 km) downstream from South Branch, and 17.8 mi (28.6 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--436 mi² (1,129 km²) revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1939 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1971: 1956(M). WRD NY 1974: 1940-42 (M, P).

GAGE.--Water-stage recorder. Datum of gage is 738.85 ft (225.201 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1969, at datum 0.11 ft (0.034 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low and medium flow caused by powerplant 20 mi (32 km) upstream from station.

AVERAGE DISCHARGE.--42 years (water years 1941-82), 738 ft³/s (20.90 m³/s), 23.20 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft³/s (980 m³/s) Mar. 7, 1956, gage height, 14.14 ft (4.310 m); minimum, about 6 ft³/s (0.17 m³/s) Aug. 21, 1941, result of regulation; minimum gage height, 0.90 ft (0.274 m) Oct. 26, 1951; minimum daily discharge, 52 ft³/s (1.47 m³/s) Sept. 13, 1945, Aug. 1, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,000 ft³/s (227 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 13	1300	*11,500	326	*8.47	2.582	Mar. 31	2300	8,230	233	7.25	2.210

Minimum discharge, 100 ft³/s (2.83 m³/s) Sept. 14, gage height, 1.36 ft (0.415 m), may have been less during period of doubtful gage-height record Aug. 14 to Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	527	775	674	370	380	4880	406	292	360	192	200
2	2930	503	982	666	420	350	2330	390	355	292	192	1580
3	2510	467	929	608	480	330	2270	365	276	264	237	2040
4	1080	444	791	1920	500	350	2660	351	256	264	712	603
5	720	427	736	2410	480	410	1540	341	704	252	490	346
6	768	1290	681	1180	450	440	1450	328	2930	230	305	272
7	1400	1950	622	991	430	410	1190	318	1120	209	241	288
8	1210	1150	870	712	410	380	1070	422	622	237	268	233
9	736	904	870	600	390	350	1050	608	450	219	467	209
10	540	674	712	480	370	370	1090	455	375	195	365	192
11	467	580	658	400	350	500	1350	370	375	195	301	179
12	427	521	651	380	340	1860	1290	337	337	301	244	173
13	390	473	615	370	340	5270	2820	314	433	212	219	167
14	351	467	594	360	360	4880	2470	305	791	189	183	135
15	332	455	594	350	450	3030	1600	292	433	183	160	195
16	328	1580	580	340	600	2560	1480	284	673	173	150	195
17	323	1520	553	340	800	5220	1580	272	1740	170	150	165
18	323	2120	521	330	820	3000	1480	264	744	192	160	170
19	553	1120	509	330	780	2410	1030	256	484	252	150	162
20	666	2460	496	330	720	1920	885	272	433	314	180	156
21	503	1640	496	330	660	3200	827	264	461	341	160	159
22	422	1160	573	320	600	3150	716	280	433	219	150	301
23	791	938	3230	320	560	2220	642	401	355	205	140	629
24	854	830	2510	320	520	2340	577	417	328	186	160	385
25	681	720	1320	310	490	2530	527	310	297	173	190	264
26	689	622	912	300	460	2350	503	256	276	170	230	226
27	1070	2540	775	300	430	1520	509	237	276	167	170	740
28	1700	1540	712	290	410	1140	490	375	284	444	140	589
29	1020	1000	666	290	---	1060	450	887	1050	484	130	370
30	720	823	608	290	---	1450	417	438	608	260	130	305
31	594	---	546	330	---	5510	---	346	---	216	140	---
TOTAL	26498	31445	26087	17171	13990	60890	41173	11161	18191	7568	7106	11628
MEAN	855	1048	842	554	500	1964	1372	360	606	244	229	388
MAX	2930	2540	3230	2410	820	5510	4880	887	2930	484	712	2040
MIN	323	427	496	290	340	330	417	237	256	167	130	135
CFSM	1.96	2.40	1.93	1.27	1.15	4.51	3.15	.83	1.39	.56	.53	.89
IN.	2.26	2.68	2.23	1.47	1.19	5.20	3.51	.95	1.55	.65	.61	.99

CAL YR 1981 TOTAL 294324 MEAN 806 MAX 9600 MIN 186 CFSM 1.85 IN 25.11
WTR YR 1982 TOTAL 272908 MEAN 748 MAX 5510 MIN 130 CFSM 1.72 IN 23.28

NOTE.--Doubtful gage-height record Aug. 14 to Sept. 1.

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959, 1963-64, 1972 to current year.
CHEMICAL DATA: 1959 (e), 1963 (b), 1972 (a), 1975 (b), 1976-78 (c), 1979-80 (d), 1981-82 (c).
MINOR ELEMENTS DATA: 1972-74 (a), 1975 (b), 1976-77 (c), 1978-82 (b).
ORGANIC DATA: OC--1975 (b), 1976-77 (c), 1978-80 (d), 1981 (c).
NUTRIENT DATA: 1975 (b), 1976-77 (c), 1978-80 (d), 1981-82 (c).
BIOLOGICAL DATA:
Bacterial--1978-80 (d), 1981-82 (c).
Phytoplankton--1978 (b), 1979-80 (c), 1981 (b).
SEDIMENT DATA: 1964 (b), 1978-82 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1958 to September 1959, unpublished; January 1978 to September 1981.
pH: October 1958 to September 1959, unpublished.
WATER TEMPERATURES: October 1958 to September 1959, January 1978 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 952 micromhos Oct. 7, 1958; minimum daily, 150 micromhos Feb. 19, 1981.
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 19, 1978; minimum daily, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 to SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV												
18...	1200	2310	212	7.5	7.0	140	740	12.0	102	1100	K2000	94
JAN												
20...	1200	330	310	7.6	.0	3.7	755	14.5	100	K20	84	150
MAR												
16...	1000	2280	190	7.5	1.5	85	750	14.1	102	370	9100	89
MAY												
19...	1000	252	371	7.8	18.5	2.4	750	8.7	94	96	370	160
JUL												
13...	1230	205	383	7.9	24.0	17	760	8.5	101	K1000	150	170
SEP												
01...	1100	192	425	7.9	19.5	33	750	9.1	101	1100	810	180

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV												
18...	23	29	5.2	4.1	1.8	71	23	6.4	<.1	4.9	128	117
JAN												
20...	19	45	8.9	9.4	1.4	130	30	14	<.1	5.0	212	192
MAR												
16...	20	28	4.7	6.1	1.8	69	18	10	<.1	4.0	142	114
MAY												
19...	25	48	9.2	12	1.8	133	32	16	<.1	2.3	188	201
JUL												
13...	34	52	9.6	16	1.7	136	28	20	<.1	3.6	214	213
SEP												
01...	35	53	11	17	1.6	143	36	25	<.1	2.9	230	233

K results based on colony count outside the ideal range (non-ideal colony count).

04213500 - CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
NOV 18...	.52	.040	.36	.180	<.010	<.010	--	--	--	--	--	--
JAN 20...	1.7	.150	.38	<.010	<.010	<.010	--	--	--	--	--	--
MAR 16...	1.1	.150	.42	.250	.020	.020	2	1	<100	37	1	<1
MAY 19...	1.2	.250	1.10	.020	<.010	<.010	1	1	100	69	1	<1
JUL 13...	.77	.240	.30	.030	<.010	<.010	1	1	<100	72	1	<1
SEP 01...	.82	.340	.70	.040	<.010	<.010	1	1	100	<100	<1	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 18...	--	--	--	--	--	--	--	--	--	--	--
JAN 20...	--	--	--	--	--	--	--	--	--	--	--
MAR 16...	20	10	3	<1	13	2	5000	84	8	<1	100
MAY 19...	20	10	3	1	19	4	430	5	6	3	20
JUL 13...	10	<10	4	1	7	2	2100	16	5	2	30
SEP 01...	10	<10	2	<1	6	3	1900	20	4	1	50

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 18...	--	--	--	--	--	--	--	--	--	--	--
JAN 20...	--	--	--	--	--	--	--	--	--	--	--
MAR 16...	17	.1	.1	9	<1	<1	<1	<1	<1	20	7
MAY 19...	4	<.1	<.1	6	3	<1	<1	<1	<1	20	<12
JUL 13...	5	.2	.1	2	<1	<1	<1	<1	<1	40	4
SEP 01...	10	<.1	<.1	4	3	<1	<1	<1	<1	20	10

04213500 - CATTARAUGUS CREEK AT GOWANDA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
NOV					
18...	1205	100	3.0	212	7.0
18...	1210	80	3.0	212	7.0
18...	1215	60	3.0	212	7.0
18...	1220	40	3.0	212	7.0
18...	1225	20	3.0	213	7.0
MAR					
16...	1005	110	3.0	190	1.5
16...	1010	90	3.0	191	1.5
16...	1015	70	3.0	191	1.5
16...	1020	50	3.0	192	1.5
16...	1025	30	3.0	193	1.5
MAY					
19...	1005	25	3.0	371	18.5
19...	1010	50	3.0	371	18.5
19...	1015	75	3.0	372	18.5
19...	1020	100	3.0	371	18.5
19...	1025	125	3.0	370	18.5
JUL					
13...	1235	30	3.0	382	24.0
13...	1240	50	3.0	383	24.0
13...	1245	70	3.0	383	24.0
13...	1250	90	3.0	383	24.0
13...	1255	110	3.0	383	24.0
13...	1300	130	3.0	382	24.5
SEP					
01...	1105	20	1.0	425	19.5
01...	1110	40	1.0	425	19.5
01...	1115	60	1.0	425	19.5
01...	1120	80	1.0	425	19.5
01...	1125	100	1.0	424	19.5
01...	1130	125	1.0	423	19.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
NOV							
18...	1200	2310	344	2150	--	--	--
JAN							
20...	1200	330	8	7.1	--	--	--
MAR							
16...	1000	2280	229	1410	25	38	51
MAY							
19...	1000	252	12	8.2	--	--	--
JUL							
13...	1230	205	28	15	--	--	--
SEP							
01...	1100	192	52	27	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV							
18...	--	--	--	--	--	--	--
JAN							
20...	--	--	--	--	--	--	--
MAR							
16...	66	77	86	91	93	93	100
MAY							
19...	--	--	--	--	--	--	--
JUL							
13...	--	--	--	--	--	--	--
SEP							
01...	--	--	--	--	--	--	--

04214500 BUFFALO CREEK AT GARDENVILLE, NY

LOCATION.--Lat 42°51'17", long 78°45'19", Erie County, Hydrologic Unit 04120103, on left back 300 ft (91 m) downstream from bridge on Union Road in Gardenville, 2 mi (3 km) upstream from Cayuga Creek, and 10.1 mi (16.3 km) upstream from mouth.

DRAINAGE AREA.--142 mi^2 (368 km^2) revised.

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1337: 1939-52. WSP 1912: Drainage area. WRD NY-78-1: 1939-1976 (P).

GAGE.--Water-stage recorder. Datum of gage is 603.65 ft (183.993 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 26, 1968, water-stage recorder at site 400 ft (122 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--44 years, 198 ft^3/s (5.607 m^3/s), 18.67 in/yr (474 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s (320 m^3/s) Mar. 1, 1955, Mar. 7, 1956, from rating curve extended above 3,200 ft^3/s (90.6 m^3/s) on basis of slope-area measurement at gage height 7.07 ft (2.155 m); maximum gage height, 14.34 ft (4.371 m) Mar. 21, 1978 (ice jam); minimum discharge, 0.2 ft^3/s (0.006 m^3/s) Sept 1, 1964; minimum gage height, 0.66 ft (0.201 m) Aug. 17, 19, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,370 ft^3/s (152 m^3/s) Mar. 13 at 2300 hours, gage height, 6.59 ft (2.001 m), no other peak above base of 3,750 ft^3/s (106 m^3/s); maximum gage height, 8.95 ft (2.728 m) Mar. 13 at 1130 hours (ice jam); minimum discharge, 13 ft^3/s (0.37 m^3/s) Aug. 17, 19, gage height, 0.66 ft (0.201 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	100	141	296	88	100	1200	66	54	54	29	54
2	426	91	244	228	98	92	426	64	63	38	37	61
3	485	84	188	178	110	88	417	61	50	32	53	232
4	207	78	158	1130	120	92	517	57	41	30	41	88
5	123	74	141	835	120	100	280	54	103	30	42	48
6	158	221	126	329	110	120	304	53	1200	27	34	34
7	399	441	110	262	110	110	254	50	288	25	27	27
8	258	228	217	182	100	100	254	95	126	24	26	28
9	144	151	247	150	100	94	296	178	78	26	31	25
10	105	113	161	120	96	96	333	91	64	23	28	22
11	86	98	144	110	94	940	460	64	66	23	23	21
12	74	91	164	100	90	1900	324	59	53	51	21	20
13	66	80	158	100	86	2700	628	56	129	48	20	18
14	63	76	148	100	82	2250	554	53	175	28	18	18
15	59	74	148	100	80	1170	292	48	98	22	17	25
16	63	1200	141	98	92	928	244	47	98	20	15	25
17	63	696	135	96	120	1800	244	44	355	18	15	23
18	82	671	130	94	200	856	244	40	141	30	16	24
19	161	329	130	92	190	696	175	40	84	66	15	23
20	132	577	140	88	170	549	154	44	70	53	17	23
21	88	506	150	86	170	1000	221	41	64	86	18	22
22	72	346	1220	86	160	891	151	38	61	40	17	37
23	154	240	1980	86	160	628	121	50	56	28	16	45
24	210	203	747	86	150	623	103	48	48	23	15	36
25	121	185	320	86	130	652	91	42	42	21	57	31
26	247	154	192	84	120	646	86	41	41	19	35	28
27	337	511	164	80	110	372	86	37	42	19	26	115
28	426	296	164	78	110	277	84	48	40	171	19	132
29	244	181	148	78	---	273	74	181	57	154	17	59
30	148	138	148	78	---	475	68	74	93	56	17	41
31	115	---	132	80	---	1620	---	54	---	35	20	---
TOTAL	5411	8233	8536	5596	3366	22238	8685	1918	3880	1320	782	1385
MEAN	175	274	275	181	120	717	290	61.9	129	42.6	25.2	46.2
MAX	485	1200	1980	1130	200	2700	1200	181	1200	171	57	232
MIN	59	74	110	78	80	88	68	37	40	18	15	18
CFSM	1.23	1.93	1.94	1.28	.85	5.05	2.04	.44	.91	.30	.18	.33
IN.	1.42	2.16	2.24	1.47	.88	5.83	2.28	.50	1.02	.35	.20	.36

CAL YR 1981 TOTAL 72991 MEAN 200 MAX 3190 MIN 20 CFSM 1.41 IN 19.12
WTR YR 1982 TOTAL 71350 MEAN 195 MAX 2700 MIN 15 CFSM 1.37 IN 18.69

04215000 CAYUGA CREEK NEAR LANCASTER, NY

LOCATION.--Lat 42°53'24", long 78°38'43", Erie County, Hydrologic Unit 04120103, on right bank 150 ft (46 m) upstream from low dam in Como Lake Park, 700 ft (210 m) downstream from bridge on Bowen Road, 800 ft (240 m) downstream from Little Buffalo Creek, 2 mi (3.2 km) southeast of Lancaster, and 8.7 mi (14.0 km) upstream from mouth.

DRAINAGE AREA.--96.4 mi² (250 km²) revised.

PERIOD OF RECORD.--September 1938 to September 1968. October 1971 to April 1974 (peak discharges only). May 1974 to current year.

GAGE.--Water-stage recorder and low concrete dam as control. Datum of gage is 672.02 ft (204.832 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Since August 1962, undetermined amount of flow diverted by Lancaster Country Club for irrigation upstream from station. Concrete dam configuration modified in September 1974 resulting in a lower point of zero flow.

AVERAGE DISCHARGE.--38 years (water years 1939-68, 1975-82) 129 ft³/s (3.653 m³/s), 18.17 in/yr (462 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft³/s (267 m³/s Sept. 14, 1979, gage height, 10.48 ft (3.194 m); maximum gage height, 12.58 ft (3.834 m) Mar. 30, 1960 (ice jam); practically no flow part of Aug. 8, 9, 1939, when stoplogs were installed in the dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft³/s (79.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 23	1145	3,020	85.5	6.92	2.109	Mar. 14	1100	*8,170	231	9.80	2.987
Mar. 14	0500	ice jam		*10.83	3.301						

Minimum discharge, 3.8 ft³/s (0.108 m³/s) July 27, gage height, 2.64 ft (0.805 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	72	92	257	47	39	617	34	29	25	13	13
2	204	62	172	214	52	37	243	33	39	17	20	51
3	244	55	117	127	64	36	253	30	26	13	54	228
4	140	47	96	1140	60	35	302	25	20	12	28	58
5	87	44	82	622	52	40	199	26	52	11	33	24
6	122	157	66	228	48	56	192	24	978	9.6	18	14
7	270	246	59	175	44	52	185	23	246	8.3	12	11
8	234	164	131	94	41	46	192	73	111	7.3	11	8.9
9	128	113	154	86	39	43	239	137	57	7.3	13	7.6
10	84	74	92	58	37	40	287	53	38	6.4	11	7.0
11	60	64	82	46	35	250	308	34	56	5.9	8.9	6.4
12	48	57	88	46	35	800	227	29	33	17	7.9	6.2
13	40	47	80	46	34	1500	401	26	37	15	7.6	5.6
14	35	45	80	46	34	3600	331	24	102	8.6	7.3	5.4
15	32	44	85	46	34	893	188	21	54	5.9	7.3	8.6
16	31	1060	85	45	45	633	158	19	44	5.1	5.6	8.6
17	33	556	60	44	70	1270	148	18	140	4.9	5.1	7.0
18	44	468	50	43	88	549	166	17	60	10	5.9	7.0
19	162	211	42	42	78	437	116	16	34	50	5.1	7.3
20	98	394	45	41	72	381	107	19	29	30	7.0	6.4
21	54	359	46	41	70	657	182	19	27	29	8.9	6.4
22	43	232	54	40	64	532	114	19	22	13	7.3	9.6
23	143	149	1110	39	58	392	81	26	21	8.6	6.7	14
24	169	123	605	38	54	367	65	21	18	6.4	6.2	11
25	94	104	228	38	49	360	55	19	15	5.9	42	8.6
26	233	88	140	38	46	436	50	17	16	5.9	36	7.6
27	323	329	109	37	43	257	51	15	17	4.7	14	67
28	383	175	119	38	41	197	47	21	15	221	8.9	67
29	198	113	102	38	---	208	41	167	30	129	7.0	27
30	129	86	86	39	---	374	37	50	44	35	6.2	17
31	91	---	83	43	---	951	---	31	---	18	8.6	---
TOTAL	4023	5738	4440	3875	1434	15468	5582	1086	2410	745.8	432.5	726.2
MEAN	130	191	143	125	51.2	499	186	35.0	80.3	24.1	14.0	24.2
MAX	383	1060	1110	1140	88	3600	617	167	978	221	54	228
MIN	31	44	42	37	34	35	37	15	15	4.7	5.1	5.4
CFSM	1.35	1.98	1.48	1.30	.53	5.18	1.93	.36	.83	.25	.15	.25
IN.	1.55	2.21	1.71	1.50	.55	5.97	2.15	.42	.93	.29	.17	.28

CAL YR 1981 TOTAL 45911.9 MEAN 126 MAX 1830 MIN 2.9 CFSM 1.31 IN 17.72
WTR YR 1982 TOTAL 45960.5 MEAN 126 MAX 3600 MIN 4.7 CFSM 1.31 IN 17.74

04215500 CAZENOVIA CREEK AT EBENEZER, NY

LOCATION.--Lat 42°49'47", long 78°46'31", Erie County, Hydrologic Unit 04120103, on right bank 30 ft (9 m) upstream from bridge on Ridge Road in Ebenezer, 4.0 mi (6.4 km) upstream from mouth, and 5 mi (8 km) southeast of Buffalo.

DRAINAGE AREA.--135 mi² (350 km²) revised.

PERIOD OF RECORD.--June 1940 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1973: 1972 (M).

GAGE.--Water-stage recorder. Datum of gage is 604.86 ft (184.361 m) National Geodetic Vertical Datum of 1929. Prior Prior to Apr. 4, 1955, at datum 2.00 ft (0.610 m) higher. Apr. 4 to Oct. 12, 1955, nonrecording gage at temporary site 1.3 mi (2.1 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--42 years (water years 1941-82), 229 ft³/s (6.485 m³/s), 23.04 in/yr (585 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft³/s (382 m³/s) Mar. 1, 1955, gage height, 15.82 ft (4.822 m) present datum, from rating curve extended above 7,700 ft³/s (218 m³/s); minimum, 2.6 ft³/s (0.074 m³/s) Nov. 7, 1953; minimum gage height, 1.87 ft (0.570 m) June 28, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,740 ft³/s (134 m³/s) Mar. 13 at 1945 hours, gage height, 8.15 ft (2.484 m), no other peak above base of 4,000 ft³/s (113 m³/s); maximum gage height, 9.41 ft (2.868 m) Mar. 13 at 1400 hours (ice jam); minimum discharge, 16 ft³/s (0.45 m³/s) Aug. 19-20, 31, gage height, 1.97 ft (0.600 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199	99	194	372	88	100	1600	80	75	88	29	85
2	825	90	335	265	96	94	612	78	80	54	48	75
3	660	80	223	164	110	90	683	73	64	43	60	309
4	243	75	181	1230	120	92	695	68	54	40	82	90
5	149	71	164	838	120	100	386	66	335	38	96	43
6	228	353	145	367	110	120	340	64	1760	36	52	29
7	420	555	127	250	110	120	270	62	381	33	37	23
8	213	290	295	200	100	110	290	127	172	31	38	23
9	130	208	290	160	100	96	330	208	108	33	54	20
10	99	138	194	140	96	100	367	105	88	28	42	19
11	82	114	172	110	94	740	436	80	78	29	31	19
12	70	102	177	100	90	2100	340	70	66	60	28	18
13	64	88	160	100	86	3100	1120	64	93	56	24	17
14	60	80	152	100	82	2410	793	62	120	34	23	17
15	56	80	152	98	82	1320	479	56	85	28	21	47
16	58	1020	152	96	98	1010	462	52	141	24	20	30
17	56	707	141	96	150	2250	484	48	457	24	23	22
18	99	924	124	94	200	965	436	43	152	37	21	23
19	194	395	120	92	180	774	249	45	93	88	16	22
20	160	672	130	88	170	636	254	48	75	105	22	21
21	99	624	140	86	170	1130	363	43	68	114	22	20
22	78	400	190	86	160	986	203	43	78	48	18	52
23	238	295	1600	86	160	719	156	68	62	36	18	127
24	238	249	787	84	150	774	134	60	56	30	18	80
25	127	218	363	84	140	825	117	56	47	25	62	43
26	324	177	243	82	130	787	111	47	43	22	38	36
27	363	972	190	80	120	425	108	47	43	25	23	309
28	400	410	168	78	110	319	102	71	42	249	19	172
29	243	238	152	76	---	319	90	367	93	120	18	73
30	145	168	172	76	---	490	83	105	164	52	17	52
31	114	---	149	82	---	2580	---	75	---	36	37	---
TOTAL	6434	9892	7782	5860	3422	25681	12093	2481	5173	1666	1057	1916
MEAN	208	330	251	189	122	828	403	80.0	172	53.7	34.1	63.9
MAX	825	1020	1600	1230	200	3100	1600	367	1760	249	96	309
MIN	56	71	120	76	82	90	83	43	42	22	16	17
CFSM	1.54	2.44	1.86	1.40	.90	6.13	2.99	.59	1.27	.40	.25	.47
IN.	1.77	2.73	2.14	1.61	.94	7.08	3.33	.68	1.43	.46	.29	.53

CAL YR 1981 TOTAL 78794 MEAN 216 MAX 3800 MIN 18 CFSM 1.60 IN 21.71
WTR YR 1982 TOTAL 83457 MEAN 229 MAX 3100 MIN 16 CFSM 1.70 IN 23.00

04215900 LAKE ERIE AT BUFFALO, NY

LOCATION.--Lat 42°52'39", long 78°53'26", Erie County, Hydrologic Unit 04120200, near outer end of Buffalo River South Pier, at Buffalo.

DRAINAGE AREA.--263,700 mi² (683,000 km²).

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

REVISED RECORDS.--WDR NY-75-1: 1974.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Feb. 5, 1899, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Lake Survey Center, Detroit, Mich.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 579.09 ft (176.507 m) Nov. 3, 1955; minimum, 564.17 ft (171.959 m) Mar. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 577.95 ft (176.159 m) Jan. 10; minimum elevation, 567.91 ft (173.099 m) Apr. 6.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	572.23	571.59	571.06	572.09	571.89	571.33	572.34	572.24	572.23	572.26	572.09	571.42
2	572.28	571.59	572.35	570.80	570.90	571.04	571.70	572.25	572.28	572.28	572.04	571.55
3	571.95	571.45	571.53	571.28	570.97	570.99	573.46	572.20	571.71	572.10	571.83	571.99
4	571.82	571.54	571.22	573.23	571.12	570.91	573.80	572.10	571.92	572.06	572.06	571.62
5	571.91	571.62	571.46	572.15	571.01	571.50	571.63	572.06	571.88	572.11	571.78	571.45
6	572.80	572.56	571.40	571.51	571.52	571.08	571.30	572.11	572.11	572.14	571.62	571.31
7	572.82	572.01	571.57	571.62	571.33	571.23	572.34	572.18	572.18	572.35	571.79	570.78
8	571.75	571.79	571.69	572.91	571.09	571.08	572.18	572.22	572.21	572.23	571.90	571.15
9	571.52	571.38	571.64	571.62	571.07	571.46	572.07	572.22	572.11	572.17	572.13	571.31
10	571.27	571.55	571.57	574.22	571.12	571.07	572.37	572.17	572.29	572.06	572.06	571.26
11	571.32	571.66	571.37	574.54	571.01	571.13	572.47	572.10	572.19	572.30	571.89	571.22
12	571.16	571.21	571.24	571.19	570.98	571.12	572.05	572.18	572.14	572.49	571.79	571.19
13	571.43	571.30	571.37	570.92	571.00	571.88	572.43	572.12	572.25	572.10	571.81	571.19
14	571.57	571.29	571.23	571.02	570.92	571.51	572.28	572.02	572.21	572.03	571.76	571.27
15	571.76	571.27	571.27	571.29	570.96	571.03	572.14	572.03	572.42	572.05	571.72	571.09
16	571.57	571.41	571.60	572.28	570.81	571.33	572.19	572.08	572.12	572.04	571.73	571.38
17	571.45	571.63	570.82	571.98	569.87	571.83	572.65	572.03	572.29	572.15	571.71	571.11
18	573.49	571.73	571.56	570.91	570.81	571.73	572.37	571.97	572.18	572.23	571.69	571.57
19	572.28	571.13	571.61	570.78	571.15	571.76	572.18	572.13	572.34	572.15	571.92	571.09
20	572.20	572.31	571.63	570.84	571.03	571.47	572.36	572.10	572.28	572.01	572.02	571.42
21	571.11	572.39	571.76	570.08	571.04	572.30	572.61	571.69	572.61	572.06	571.53	571.12
22	571.10	571.97	571.19	570.10	571.06	572.08	572.43	571.59	572.29	571.97	571.75	571.17
23	571.79	571.53	571.60	572.27	570.99	571.92	572.45	571.96	572.35	571.84	571.83	571.57
24	571.43	571.16	572.44	572.83	570.45	571.84	572.31	572.06	572.20	571.94	571.50	571.36
25	571.44	571.27	571.62	571.04	571.08	571.94	572.22	572.02	572.24	572.15	571.91	571.09
26	571.30	571.22	571.01	570.99	571.12	572.31	572.21	571.96	572.04	572.03	571.73	571.10
27	571.36	572.91	571.92	570.84	571.02	572.16	572.26	571.90	572.05	571.68	571.70	571.09
28	571.45	572.02	571.24	571.35	570.90	572.00	572.14	572.08	572.06	572.14	571.50	571.25
29	571.27	571.59	571.60	570.88	---	571.88	572.15	572.13	572.21	571.94	571.40	571.04
30	571.37	571.22	571.50	570.90	---	571.85	572.16	572.16	572.28	571.91	571.40	571.24
31	571.48	---	571.10	569.80	---	572.42	---	572.14	---	572.22	571.31	---
MEAN	571.73	571.64	571.49	571.56	571.01	571.59	572.31	572.07	572.19	572.10	571.77	571.28
MAX	573.49	572.91	572.44	574.54	571.89	572.42	573.80	572.25	572.61	572.49	572.13	571.99
MIN	571.10	571.13	570.82	569.80	569.87	570.91	571.30	571.59	571.71	571.68	571.31	570.78

CAL YR 1981 MEAN 571.56 MAX 573.49 MIN 570.15
WTR YR 1982 MEAN 571.73 MAX 574.54 MIN 569.80

04216000 NIAGARA RIVER AT BUFFALO, NY

LOCATION.--Lat 42°52'40", long 78°55'00", Erie County, Hydrologic Unit 04120200, at head of Niagara River at Buffalo, and 41.7 mi (67.1 km) upstream from mouth.

DRAINAGE AREA.--263,700 mi^2 (683,000 km^2).

PERIOD OF RECORD.--January 1860 to September 1960 (monthly discharges only published in WSP 1912), October 1960 to current year. Records of January 1926 to September 1960 daily discharges available in files of U.S. Department of Commerce and U.S. Geological Survey.

REVISED RECORDS.--WSP 1912: 1862(M), 1955 (M), 1936 (M), WDR NY-77-1: Drainage area.

GAGE.--Discharge determined from several powerplants at Niagara Falls and discharge over the falls. Discharge before 1926 determined from records of Corps of Engineers gages at Buffalo and Cleveland.

REMARKS.--Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900, and from Lake Erie by Welland and New York State Canals before 1918. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943. Figures of monthly mean discharge for 1860 to 1960 and daily discharge for 1961 to 1965, published in WSP 1912, are the official records of the U.S. Lake Survey, and have been coordinated with and concurred by the counterpart Canadian agencies, as have been the extremes for period of record through December 1976 and records October 1977 to current year.

COOPERATION.--Records of daily discharge furnished by Detroit District Corps of Engineers and Canada Department of the Environment.

AVERAGE DISCHARGE.--122 years, 204,000 ft^3/s (5,777 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 299,000 ft^3/s (8,470 m^3/s) Nov. 17, 1955; minimum daily, 90,000 ft^3/s (2,550 m^3/s) Jan. 13, 1964. Maximum monthly mean discharge, 264,700 ft^3/s (7,500 m^3/s) May 1974; minimum monthly mean, 116,200 ft^3/s (3,290 m^3/s) February 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 284,000 ft^3/s (8,043 m^3/s) Jan. 11; minimum daily, 185,000 ft^3/s (5,239 m^3/s) Feb. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231000	226000	210000	233000	226000	213000	244000	234000	240000	235000	224000	212000
2	239000	223000	233000	211000	207000	212000	232000	232000	240000	236000	225000	219000
3	230000	220000	223000	214000	206000	205000	252000	229000	228000	231000	219000	229000
4	228000	222000	215000	248000	210000	202000	247000	229000	231000	228000	226000	219000
5	229000	222000	217000	257000	205000	223000	205000	226000	231000	227000	218000	217000
6	244000	238000	216000	224000	215000	210000	188000	230000	240000	228000	217000	216000
7	251000	231000	220000	223000	212000	214000	207000	230000	240000	230000	219000	198000
8	228000	229000	224000	242000	208000	208000	209000	229000	241000	228000	223000	209000
9	222000	218000	219000	228000	210000	216000	215000	230000	239000	225000	226000	212000
10	215000	219000	219000	255000	201000	210000	227000	228000	241000	222000	226000	212000
11	216000	226000	218000	284000	200000	214000	232000	228000	238000	225000	224000	212000
12	213000	211000	216000	204000	206000	217000	227000	230000	238000	232000	220000	210000
13	215000	217000	215000	199000	210000	229000	229000	228000	239000	219000	221000	209000
14	221000	215000	214000	204000	208000	235000	231000	227000	238000	220000	222000	211000
15	224000	214000	213000	208000	206000	222000	232000	232000	239000	220000	220000	208000
16	223000	220000	219000	216000	205000	224000	232000	234000	241000	219000	220000	212000
17	220000	223000	209000	224000	185000	235000	230000	233000	239000	223000	220000	208000
18	253000	226000	216000	215000	202000	233000	239000	232000	238000	223000	220000	216000
19	248000	217000	222000	204000	211000	232000	232000	235000	242000	223000	221000	208000
20	238000	235000	222000	205000	212000	225000	232000	236000	240000	219000	228000	213000
21	212000	244000	224000	191000	212000	234000	238000	228000	246000	220000	217000	209000
22	209000	237000	216000	191000	210000	238000	234000	225000	240000	218000	223000	206000
23	226000	227000	220000	220000	211000	232000	233000	232000	241000	216000	223000	216000
24	222000	215000	242000	255000	192000	230000	235000	233000	237000	218000	218000	214000
25	219000	216000	230000	207000	208000	228000	229000	234000	237000	222000	225000	208000
26	216000	218000	216000	204000	211000	236000	225000	231000	234000	220000	225000	207000
27	219000	243000	223000	204000	211000	236000	225000	230000	232000	215000	222000	208000
28	226000	236000	223000	212000	208000	232000	220000	234000	232000	221000	218000	210000
29	220000	228000	222000	204000	---	230000	219000	235000	236000	219000	215000	207000
30	220000	216000	221000	206000	---	229000	228000	237000	237000	220000	215000	211000
31	224000	---	213000	186000	---	237000	---	236000	---	226000	213000	---
TOTAL	7001000	6732000	6810000	6778000	5808000	6941000	6828000	7167000	7135000	6928000	6856000	6346000
MEAN	225800	224400	219700	218600	207400	223900	227600	231200	237800	223500	221200	211500
MAX	253000	244000	242000	284000	226000	238000	252000	237000	246000	236000	228000	229000
MIN	209000	211000	209000	186000	185000	202000	188000	225000	228000	215000	213000	198000

CAL YR 1981 TOTAL 80203000 MEAN 219700 MAX 253000 MIN 189000
WTR YR 1982 TOTAL 81330000 MEAN 222800 MAX 284000 MIN 185000

04216200 SCAJAQUADA CREEK AT BUFFALO, NY

LOCATION.--Lat 42°54'41", long 78°47'45", Erie County, Hydrologic Unit 04120103, on right bank 58 ft (18 m) upstream from point where stream goes underground in concrete-lined tunnel, 86 ft (26 m) upstream from Pine Ridge Road, 0.2 mi (0.3 km) east of boundary line of city of Buffalo, and 6.2 mi (10.0 km) upstream from mouth.

DRAINAGE AREA.--15.4 mi^2 (39.9 km^2) revised.

PERIOD OF RECORD.--Feburary 1957 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 626.26 ft (190.884 m) National Geodetic Vertical Datum of 1929 (city of Buffalo bench mark).

REMARKS.--Records good. Discharge includes flow diverted from Lake Erie and Niagara River as sewage-plant effluent entering basin upstream from station through June 1982.

COOPERATION.--Town of Cheektowaga maintains records of sewage-plant discharge.

AVERAGE DISCHARGE.--25 years, 35.3 ft^3/s (1.000 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft^3/s (74.2 m^3/s) Aug. 7, 1963, gage height, 14.38 ft (4.383 m); minimum, 1.2 ft^3/s (0.03 m^3/s) Sept. 12, 13, 1982, gage height, 1.36 ft (0.414 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (1 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 11	1730	662	18.7	5.43	1.655
Mar. 13	1530	677	19.2	5.51	1.679
May 22	0900	*749	21.2	*5.89	1.795

Minimum discharge, 1.2 ft^3/s (0.03 m^3/s) Sept. 12, 13, gage height, 1.36 ft (0.414 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	18	38	135	25	23	47	15	20	9.4	3.1	31
2	29	18	37	39	22	21	27	14	19	13	52	42
3	33	17	39	26	30	20	126	17	17	9.0	7.7	26
4	20	16	25	306	32	71	53	17	16	8.1	27	5.4
5	18	17	22	62	25	89	40	17	106	8.1	5.1	2.9
6	46	29	20	31	22	47	31	16	283	8.5	3.4	2.4
7	40	29	20	29	19	34	30	16	46	6.8	2.7	2.4
8	24	19	46	21	19	26	39	64	25	3.9	7.7	2.4
9	19	18	31	19	19	22	52	20	20	2.9	5.4	2.4
10	17	17	23	16	21	30	46	17	24	2.4	3.1	2.4
11	15	17	23	15	17	296	33	17	19	5.7	2.4	2.2
12	16	17	23	17	15	181	29	16	17	28	2.7	2.0
13	15	16	21	16	16	396	59	16	17	5.7	2.7	2.2
14	15	15	23	16	15	156	39	17	38	4.5	2.2	2.7
15	14	14	25	15	56	81	26	15	18	4.2	2.0	23
16	17	290	25	15	82	76	23	14	23	4.5	2.9	4.5
17	15	71	20	14	53	170	29	16	17	4.2	2.4	3.1
18	52	42	18	14	42	59	23	16	16	3.9	2.2	14
19	29	29	17	14	56	47	20	17	23	12	2.4	3.9
20	18	67	16	14	59	42	30	33	16	4.8	19	4.2
21	17	79	16	14	84	44	30	19	30	4.2	3.6	11
22	17	38	20	14	58	43	20	227	17	3.9	2.2	52
23	71	26	245	20	50	34	18	34	17	4.2	3.1	20
24	28	21	70	18	42	29	17	22	15	3.6	2.7	6.8
25	20	20	32	17	31	30	16	18	15	2.9	128	5.4
26	135	18	23	15	25	65	16	17	27	3.9	8.1	3.9
27	156	40	24	15	26	37	17	20	15	12	3.6	87
28	100	22	34	16	25	26	15	62	16	32	2.9	14
29	37	20	30	16	---	29	16	44	27	6.8	2.2	6.1
30	24	19	24	29	---	30	16	26	13	3.9	2.2	4.2
31	20	---	22	25	---	93	---	24	---	3.6	24	---
TOTAL	1117	1079	1052	1033	987	2347	983	903	972	230.6	340.7	391.5
MEAN	36.0	36.0	33.9	33.3	35.3	75.7	32.8	29.1	32.4	7.44	11.0	13.1
MAX	156	290	245	306	84	396	126	227	283	32	128	87
MIN	14	14	16	14	15	20	15	14	13	2.4	2.0	2.0

CAL YR 1981 TOTAL 13382.0 MEAN 36.7 MAX 334 MIN 11
WTR YR 1982 TOTAL 11435.8 MEAN 31.3 MAX 396 MIN 2.0

04216418 TONAWANDA CREEK AT ATTICA, NY

LOCATION.--Lat 42°51'50", long 78°17'02", Wyoming County, Hydrologic Unit 04120104, on right bank behind Village Hall and fire station, 150 ft (46 m) downstream from bridge on State Highway 238 (Main Street) at Attica, and 0.4 mi (0.6 km) upstream from Tannery Creek.

DRAINAGE AREA.--76.9 mi² (199 km²) revised.

PERIOD OF RECORD.--October 1977 to current year.

REVISED RECORDS.--WDR-79-1: 1978 (M).

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 954.63 ft (290.971 m) National Geodetic Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--5 years, 120 ft³/s (3.398 m³/s), 21.19 in/yr (538 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,690 ft³/s (133 m³/s) Sept. 14, 1979, gage height, 9.10 ft (2.774 m); maximum gage height, 12.40 ft (3.780 m) Feb. 18, 1979 (backwater from ice); minimum discharge, 9.2 ft³/s (0.26 m³/s) Sept. 2, 3, 7, 8, 1978, gage height, 3.38 ft (1.030 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 6,000 ft³/s (170 m³/s) June 23, 1972, gage height, about 12.0 ft (3.66 m) present site and datum, from information supplied by Village of Attica.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 16	1145	1,800	51.0	6.39	1.948	Mar. 13	1615	*2,090	59.2	6.70	2.042
Jan. 4	1815	1,230	34.8	5.73	1.746	Mar. 31	2015	1,620	45.9	6.19	1.887
Mar. 13	1330	ice jam		*7.00	2.134	June 6	0130	1,290	36.5	5.80	1.768

Minimum discharge, 11 ft³/s (0.31 m³/s) Sept. 19-22, gage height, 3.40 ft (1.036 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	63	88	101	60	58	602	46	23	44	26	32
2	174	58	124	85	68	56	278	46	44	28	28	38
3	194	53	101	77	64	54	352	44	25	25	32	131
4	110	51	88	537	92	54	302	42	23	25	36	46
5	82	48	85	317	74	70	198	40	104	23	40	28
6	110	142	74	174	66	66	150	40	677	20	30	23
7	260	178	63	135	58	62	160	38	170	20	26	21
8	251	117	91	90	54	54	140	71	85	23	23	20
9	117	94	88	70	52	50	135	101	58	20	23	18
10	85	71	77	66	50	50	182	56	44	18	23	15
11	71	66	74	60	49	70	211	46	42	20	21	14
12	61	61	71	58	48	300	207	42	38	71	20	14
13	53	53	71	58	47	900	420	42	88	28	17	14
14	48	51	71	56	46	836	292	38	128	21	17	13
15	44	51	68	56	56	502	215	34	61	20	17	13
16	44	809	68	54	90	399	224	32	98	20	17	13
17	44	357	56	54	130	768	237	32	170	21	18	13
18	42	312	54	54	120	399	202	28	74	46	18	13
19	74	182	52	54	110	336	135	26	53	85	17	11
20	61	347	50	54	104	331	128	26	48	58	20	11
21	46	237	50	54	101	508	135	26	40	51	21	11
22	44	178	70	54	98	410	101	25	40	34	18	14
23	98	135	490	54	88	347	82	28	38	28	17	18
24	94	121	297	52	71	388	77	28	32	23	17	17
25	68	107	140	52	68	378	74	25	28	21	23	14
26	107	94	100	50	64	399	66	25	28	21	25	14
27	174	288	90	50	62	224	63	21	28	20	18	42
28	198	150	85	49	60	170	61	28	28	135	15	34
29	121	110	80	48	---	174	53	40	38	74	17	21
30	85	88	66	50	---	326	53	28	51	40	17	18
31	71	---	68	56	---	1020	---	25	---	30	23	---
TOTAL	3116	4672	3050	2779	2050	9759	5535	1169	2404	1113	680	704
MEAN	101	156	98.4	89.6	73.2	315	185	37.7	80.1	35.9	21.9	23.5
MAX	260	809	490	537	130	1020	602	101	677	135	40	131
MIN	42	48	50	48	46	50	53	21	23	18	15	11
CFSM	1.31	2.03	1.28	1.17	.95	4.10	2.41	.49	1.04	.47	.29	.31
IN.	1.51	2.26	1.48	1.34	.99	4.72	2.68	.57	1.16	.54	.33	.34

CAL YR 1981 TOTAL 38240 MEAN 105 MAX 1520 MIN 13 CFSM 1.37 IN 18.50
WTR YR 1982 TOTAL 37031 MEAN 101 MAX 1020 MIN 11 CFSM 1.31 IN 17.91

04216500 LITTLE TONAWANDA CREEK AT LINDEN, NY

LOCATION.--Lat 42°52'37", long 78°09'48", Genesee County, Hydrologic Unit 04120104, on right bank at upstream side of bridge on County Highway 13A (Depot Road) in Linden and 9.3 mi (15.0 km) upstream from mouth.

DRAINAGE AREA.--22.1 mi^2 (57.2 km^2).

PERIOD OF RECORD.--July 1912 to November 1919, April 1920 to September 1968, October 1977 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 15, 1930. Datum of gage is 1,081.62 ft (329.678 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1943, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record Aug. 31 to Sept. 30, which are poor.

AVERAGE DISCHARGE.--60 years (water years 1913-19, 1921-68, 1978-82), 27.1 ft^3/s (0.767 m^3/s), 16.65 in/yr (423 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft^3/s (76.5 m^3/s) Mar. 7, 1956, gage height, 16.04 ft (4.889 m), from high-water mark; minimum, 0.08 ft^3/s (0.002 m^3/s) Aug. 3, 4, 1955; minimum gage height, -0.14 ft (-0.043 m) Jan. 17, 1966 (siphonic action).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 504 ft^3/s (14.3 m^3/s) Mar. 13 at 2345 hours, gage height, 5.28 ft (1.609 m), no peak above base of 530 ft^3/s (15.0 m^3/s); minimum, 0.70 ft^3/s (0.020 m^3/s) Sept 21, gage height, 0.34 ft (0.104 m) from minimum stage indicator.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	24	30	12	12	235	12	4.3	5.2	2.7	2.3
2	26	16	30	27	12	11	88	10	7.4	4.1	2.7	4.5
3	46	14	27	22	25	11	93	9.6	4.6	3.9	3.4	7.0
4	29	13	24	137	15	11	88	9.1	3.8	3.9	4.6	5.0
5	19	12	22	136	13	14	58	8.6	17	3.1	3.6	3.5
6	21	23	19	60	12	13	43	8.1	251	2.7	2.7	2.5
7	39	34	19	46	12	12	46	7.8	70	2.8	2.3	2.0
8	47	29	24	36	11	11	44	18	27	3.1	2.4	1.8
9	27	23	22	28	11	11	42	23	16	2.4	2.6	1.6
10	19	17	19	22	11	11	65	16	12	2.3	2.0	1.4
11	16	16	19	15	10	16	77	12	10	2.8	2.2	1.3
12	13	15	19	10	10	80	71	9.6	11	14	2.0	1.3
13	12	13	19	20	10	240	115	8.6	25	5.0	1.9	1.2
14	10	13	19	19	10	300	90	7.8	40	2.7	1.8	1.2
15	9.8	13	19	18	12	159	56	8.1	17	2.3	1.5	1.3
16	9.1	234	19	17	19	128	50	7.6	23	2.4	1.5	1.2
17	9.3	140	16	16	22	252	48	6.7	39	2.1	1.8	1.2
18	8.8	88	15	16	21	144	43	6.1	18	3.6	1.6	1.2
19	13	51	14	15	21	122	33	6.1	12	4.6	1.4	1.1
20	11	87	13	15	20	109	32	6.7	10	3.8	2.6	1.0
21	9.1	63	14	15	20	180	34	6.1	8.8	3.3	2.0	1.0
22	8.8	46	16	14	19	159	25	5.4	8.3	2.2	1.9	1.3
23	18	35	123	14	18	127	21	6.9	8.1	2.1	1.8	2.0
24	19	30	88	14	17	128	18	5.9	6.3	2.2	1.6	1.9
25	15	27	45	13	15	131	16	5.2	5.0	2.0	2.3	1.6
26	31	24	32	13	14	144	16	4.8	5.2	1.9	2.4	1.6
27	45	66	26	13	13	80	17	4.5	6.1	1.6	1.9	4.5
28	63	39	26	13	12	59	15	4.8	4.8	23	1.6	3.5
29	35	30	24	13	---	61	13	7.8	7.2	13	1.5	2.6
30	24	25	22	12	---	102	12	5.2	7.8	5.6	1.4	2.1
31	19	---	20	12	---	279	---	4.5	---	3.4	1.9	---
TOTAL	686.9	1253	838	851	417	3117	1604	262.6	685.7	137.1	67.6	65.7
MEAN	22.2	41.8	27.0	27.5	14.9	101	53.5	8.47	22.9	4.42	2.18	2.19
MAX	63	234	123	137	25	300	235	23	251	23	4.6	7.0
MIN	8.8	12	13	10	10	11	12	4.5	3.8	1.6	1.4	1.0
CFSM	1.01	1.89	1.22	1.24	.67	4.57	2.42	.38	1.04	.20	.10	.10
IN.	1.16	2.11	1.41	1.43	.70	5.25	2.70	.44	1.15	.23	.11	.11

CAL YR 1981 TOTAL 8400.0 MEAN 23.0 MAX 380 MIN 2.0 CFSM 1.04 IN 14.14
WTR YR 1982 TOTAL 9985.6 MEAN 27.4 MAX 300 MIN 1.0 CFSM 1.24 IN 16.81

04217000 TONAWANDA CREEK AT BATAVIA, NY
(National stream-quality accounting network station)

LOCATION.--Lat 42°59'51", long 78°11'20", Genesee County, Hydrologic Unit 04120104, on right bank 150 ft (46 m) downstream from municipal dam, 500 ft (152 m) upstream from bridge on Walnut Street in Batavia, and 5.0 mi (8.0 km) downstream from Little Tonawanda Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--171 mi^2 (443 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1944 to current year.

REVISED RECORDS.--WSP 1627: 1956-57. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 876.33 ft (267.105 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diversion upstream from station by city of Batavia for municipal supply; sewage, which may include water from municipal and industrial wells upstream from gage, enters creek downstream from gage.

COOPERATION.--City of Batavia maintains records of diversion.

AVERAGE DISCHARGE.--38 years, 208 ft^3/s (5.891 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft^3/s (204 m^3/s) Mar. 31, 1960, gage height, 12.70 ft (3.871 m); maximum gage height, 13.85 ft (4.221 m) Apr. 6, 1947; minimum discharge, 0.4 ft^3/s (0.011 m^3/s) Aug. 5-7, 1955; minimum gage height, 0.59 ft (0.180 m) July 26, 27, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--From records of city of Batavia, maximum stage, 14.5 ft (4.42 m) in March 1942.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft^3/s (51 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Mar. 14	1900	*4,030	114	*9.45	2.880	Apr. 1	1430	1,950	55.2	6.10	1.859

Minimum daily discharge, 14 ft^3/s (0.40 m^3/s) Sept. 13, 21; minimum gage height, 1.42 ft (0.433 m) Aug. 16, 17, 31, Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	148	185	244	98	120	1590	95	45	72	33	31
2	252	129	248	251	120	110	1010	92	58	47	29	50
3	365	115	236	219	140	98	549	85	62	37	38	148
4	306	107	203	464	130	98	650	78	43	33	43	100
5	208	100	185	1020	140	110	420	74	50	31	55	53
6	182	126	174	820	130	140	300	70	628	27	40	35
7	361	333	151	433	130	130	270	66	858	25	33	28
8	469	257	171	251	120	114	250	83	340	27	27	25
9	311	196	219	196	110	109	260	211	181	29	26	22
10	212	151	164	181	110	100	399	133	117	23	26	20
11	164	129	161	117	100	148	496	98	100	23	23	18
12	129	121	171	120	96	549	404	81	83	62	20	18
13	110	107	167	110	94	1050	515	72	130	64	19	14
14	100	100	164	110	92	2690	677	68	174	33	19	15
15	88	100	164	110	92	2110	455	62	151	26	18	16
16	79	398	167	110	110	1280	374	58	93	22	16	16
17	83	1420	145	110	140	1130	384	53	244	21	16	16
18	77	1040	123	110	240	1410	369	47	164	33	19	16
19	105	574	100	110	210	943	275	47	95	74	18	19
20	124	505	96	110	200	650	240	55	76	68	24	16
21	95	610	94	100	190	756	275	57	66	66	29	14
22	81	437	139	100	200	984	219	53	57	40	23	16
23	97	322	331	100	190	830	178	62	57	29	19	24
24	215	271	854	100	174	677	157	55	52	24	18	23
25	145	248	776	100	151	704	142	50	42	21	28	20
26	129	215	369	98	139	733	130	45	41	19	41	19
27	302	364	267	96	130	594	130	41	45	16	27	33
28	430	384	248	92	130	394	123	45	41	76	20	83
29	370	259	215	90	---	359	111	68	45	203	17	44
30	227	211	188	90	---	505	103	66	85	70	16	31
31	172	---	157	90	---	815	---	48	---	43	16	---
TOTAL	6111	9477	7032	6252	3906	20440	11455	2218	4223	1384	796	983
MEAN	197	316	227	202	140	659	382	71.5	141	44.6	25.7	32.8
MAX	469	1420	854	1020	240	2690	1590	211	858	203	55	148
MIN	77	100	94	90	92	98	103	41	41	16	16	14

CAL YR 1981 TOTAL 80059 MEAN 219 MAX 3500 MIN 18
WTR YR 1982 TOTAL 74277 MEAN 203 MAX 2690 MIN 14

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971, 1978 to current year.
CHEMICAL DATA: 1971 (a), 1978 (c), 1980 (d), 1981-82 (c).
MINOR ELEMENT DATA: 1978-82 (b).
ORGANIC DATA: OC--1978-80 (c), 1981 (b).
NUTRIENT DATA: 1971 (a), 1978 (c), 1979-80 (d), 1981-82 (c).
BIOLOGICAL DATA:
Bacteria--1978 (c), 1979-80 (d), 1981 (b), 1982 (c).
Phytoplankton--1978 (b), 1979-80 (c), 1981 (b).
SEDIMENT DATA: 1978 (c), 1979-80 (d), 1981-82 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1978 to September 1981.
WATER TEMPERATURES: January 1978 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 850 micromhos Mar. 14, 1978; minimum daily, 200 micromhos Feb. 20, 1981.
WATER TEMPERATURES: Maximum daily, 27.0°C July 15, 19, 1979, July 19, 21, 1980; minimum daily, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (FTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV												
17...	1630	1680	290	7.3	7.0	110	735	10.7	91	K8900	K16000	130
JAN												
19...	1430	117	435	7.3	.0	2.5	750	12.5	86	K1500	140	220
MAR												
15...	1700	2240	220	7.3	1.0	60	750	13.0	93	1200	6500	110
MAY												
20...	1000	52	482	7.3	19.0	2.6	740	8.1	90	K180	K120	210
JUL												
14...	0930	35	440	7.4	22.0	4.5	750	8.1	94	240	590	200
SEP												
01...	1500	38	488	7.6	18.5	3.6	745	8.7	95	K70	K170	220

DATE	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV												
17...	21	39	8.1	7.7	5.1	110	21	12	<.1	5.5	175	165
JAN												
19...	36	65	13	11	1.9	180	34	23	<.1	5.5	286	262
MAR												
15...	13	33	5.7	8.3	2.9	93	17	11	<.1	3.7	161	138
MAY												
20...	23	61	14	13	1.9	187	33	24	.1	1.5	270	261
JUL												
14...	37	57	13	18	2.5	159	27	26	.1	4.6	291	244
SEP												
01...	36	62	15	16	2.6	181	35	27	.1	3.1	285	270

K Results based on colony count outside the acceptable range (non-ideal colony count).

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
NOV 17...	.74	.030	.77	.290	.030	.060	--	--	--	--	--	--
JAN 19...	1.7	.170	.46	.040	<.010	<.010	--	--	--	--	--	--
MAR 15...	1.2	.220	.62	.110	.050	.040	1	1	100	34	1	<1
MAY 20...	.65	.090	.65	.050	.020	<.010	2	2	100	77	1	1
JUL 14...	.58	.130	<.10	.080	.040	.030	2	2	100	74	<1	<1
SEP 01...	.48	.070	.70	.070	.040	.010	2	2	100	<100	1	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 17...	--	--	--	--	--	--	--	--	--	--	--
JAN 19...	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	--	<10	1	<1	16	3	--	66	4	3	80
MAY 20...	20	10	3	2	7	4	450	20	5	3	130
JUL 14...	<10	<10	<1	<1	6	2	1100	25	3	1	90
SEP 01...	10	<10	<1	<1	12	3	520	30	4	2	80

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 17...	--	--	--	--	--	--	--	--	--	--	--
JAN 19...	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	42	.1	<.1	5	2	<1	<1	<1	<1	10	4
MAY 20...	82	<.1	<.1	5	4	<1	<1	<1	<1	20	9
JUL 14...	62	.3	.1	3	1	<1	<1	<1	<1	40	6
SEP 01...	40	.1	<.1	6	6	<1	<1	<1	<1	60	10

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	TEMPER- ATURE (DEG C)
NOV					
17...	1600	20.0	1.00	290	6.5
17...	1605	40.0	1.00	290	6.5
17...	1610	60.0	1.00	289	7.0
17...	1615	80.0	1.00	290	7.0
JAN					
19...	1440	80.0	1.00	440	.0
19...	1445	50.0	1.00	433	.0
19...	1450	20.0	1.00	432	.0
MAR					
15...	1705	110	3.00	223	1.0
15...	1710	110	7.00	224	1.0
15...	1715	100	3.00	228	.5
15...	1720	100	7.00	230	.0
15...	1725	90.0	3.00	222	1.0
15...	1730	90.0	7.00	219	1.0
15...	1735	80.0	3.00	219	1.0
15...	1740	80.0	7.00	219	1.0
15...	1745	65.0	3.00	218	1.0
15...	1750	65.0	7.00	219	1.0
15...	1755	50.0	3.00	216	1.5
15...	1800	50.0	7.00	217	1.5
MAY					
20...	1005	20.0	1.00	482	19.0
20...	1010	30.0	1.00	482	19.0
20...	1015	40.0	1.00	482	19.0
20...	1020	50.0	1.00	481	19.0
20...	1025	60.0	1.00	485	19.0
JUL					
14...	0935	35.0	1.00	441	22.0
14...	0940	40.0	1.00	441	22.0
14...	0945	45.0	1.00	440	22.0
14...	0950	50.0	1.00	444	22.0
SEP					
01...	1505	20.0	1.00	488	18.5
01...	1510	30.0	1.00	487	18.5
01...	1515	40.0	1.00	487	18.5
01...	1520	50.0	1.00	489	18.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
NOV							
17...	1630	1680	285	1290	--	--	--
JAN							
19...	1430	117	7	2.2	--	--	--
MAR							
15...	1700	2240	95	575	37	53	65
MAY							
20...	1000	52	10	1.4	--	--	--
JUL							
14...	0930	35	9	.85	--	--	--
SEP							
01...	1500	38	6	.62	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV							
17...	--	--	--	--	--	--	--
JAN							
19...	--	--	--	--	--	--	--
MAR							
15...	77	85	91	96	99	99	100
MAY							
20...	--	--	--	--	--	--	--
JUL							
14...	--	--	--	--	--	--	--
SEP							
01...	--	--	--	--	--	--	--

04217500 TONAWANDA CREEK NEAR ALABAMA, NY

LOCATION.--Lat 43°05'28", long 78°27'15", Genesee County, Hydrologic Unit 04120104, on right bank 15 ft (5 m) downstream from bridge on Meadville Road, 0.4 mi (0.6 km) downstream from inoperable canal feeder connecting Tonawanda and Oak Orchard Creeks, 1.1 mi (1.8 km) upstream from small tributary, and 3.2 mi (5.1 km) west of Alabama.

DRAINAGE AREA.--231 mi^2 (598 km^2).

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1912: Drainage area. WRD NY 1974: 1973. WDR NY-75-1: 1959 (P).

GAGE.--Water-stage recorder. Datum of gage is 605.93 ft (184.687 m) National Geodetic Vertical Datum of 1929. Prior to October 1965, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--27 years, 281 ft^3/s (7.958 m^3/s), 16.52 in/yr (420 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,980 ft^3/s (226 m^3/s) Mar. 31, 1960, gage height, 14.28 ft (4.353 m); maximum gage height, 15.95 ft (4.862 m) Jan. 23, 1959 (ice jam); minimum daily, 7.7 ft^3/s (0.22 m^3/s) Sept. 14, 15, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,340 ft^3/s (123 m^3/s) Mar. 15 at 0800 hours, gage height, 13.12 ft (3.999 m), no other peak above base of 2,100 ft^3/s (59.5 m^3/s); minimum discharge, 26 ft^3/s (0.74 m^3/s) Sept. 20; minimum gage height, 5.15 ft (1.570 m) Aug. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	221	249	267	150	160	1410	111	96	99	55	31
2	200	197	270	400	180	150	1420	107	85	85	48	46
3	355	177	319	316	170	150	802	101	92	66	50	94
4	421	162	270	606	180	150	789	94	80	58	65	208
5	282	155	238	1230	190	160	642	89	74	52	69	105
6	227	162	221	1220	180	190	534	87	626	50	69	69
7	316	306	194	750	170	180	372	82	1230	46	54	52
8	512	365	197	432	160	170	425	98	703	44	47	44
9	459	279	252	320	150	160	480	174	332	42	41	39
10	276	221	221	250	140	150	516	224	207	45	38	36
11	210	179	208	170	130	200	598	143	162	41	39	33
12	174	165	221	160	130	923	560	115	136	47	36	31
13	146	148	208	150	120	2150	553	101	115	90	34	30
14	130	132	202	150	120	3250	772	96	187	71	32	28
15	119	125	197	150	130	3460	658	89	224	48	31	36
16	109	375	202	140	150	1900	473	82	146	40	30	41
17	101	1500	194	140	180	1510	447	79	169	35	31	31
18	107	1520	179	140	320	1660	451	74	273	34	37	31
19	109	954	197	140	290	1300	382	69	155	45	31	30
20	160	622	177	140	270	977	291	74	115	98	35	29
21	148	866	244	130	260	959	306	87	103	71	39	30
22	119	683	210	130	250	1160	300	109	90	74	41	29
23	121	495	276	130	240	1110	229	162	84	51	37	31
24	207	382	990	130	230	910	194	119	82	39	35	34
25	224	329	1330	130	210	875	172	94	72	34	68	38
26	200	288	724	130	200	910	155	80	66	31	72	33
27	313	288	418	120	180	870	146	69	68	29	58	44
28	509	564	313	120	170	579	146	66	68	35	45	75
29	587	362	282	120	---	502	132	85	69	184	36	92
30	365	285	273	120	---	598	121	105	85	136	32	160
31	264	---	255	130	---	829	---	150	---	72	31	---
TOTAL	7616	12507	9731	8661	5250	28252	14476	3215	5994	1892	1366	1610
MEAN	246	417	314	279	188	911	483	104	200	61.0	44.1	53.7
MAX	587	1520	1330	1230	320	3460	1420	224	1230	184	72	208
MIN	101	125	177	120	120	150	121	66	66	29	30	28
CFSM	1.07	1.81	1.36	1.21	.81	3.94	2.09	.45	.87	.26	.19	.23
IN.	1.23	2.01	1.57	1.39	.85	4.55	2.33	.52	.97	.30	.22	.26

CAL YR 1981 TOTAL 99468 MEAN 273 MAX 3450 MIN 25 CFSM 1.18 IN 16.02
WTR YR 1982 TOTAL 100570 MEAN 276 MAX 3460 MIN 28 CFSM 1.20 IN 16.20

04218000 TONAWANDA CREEK AT RAPIDS, NY

LOCATION.--Lat 43°05'35", long 78°38'11", Niagara County, Hydrologic Unit 04120104, on right bank at downstream side of bridge on Rapids Road at Rapids, 4.6 mi (7.4 km) east of Pendleton, 4.9 mi (7.9 km) downstream from Beeman Creek, and 5.9 mi (9.5 km) upstream from Mud Creek.

DRAINAGE AREA.--349 mi^2 (904 km^2) revised, includes 0.76 mi^2 (1.97 km^2) in Mud Creek from which flow is diverted into Black Creek.

PERIOD OF RECORD.--August 1955 to September 1965, March 1978 to September 1979 (seasonal gage-height records only), October 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 571.19 ft (174.099 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--13 years (water years 1956-65, 1980-82) 364 ft^3/s (10.31 m^3/s), 14.16 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,280 ft^3/s (178 m^3/s) Apr. 1, 1960, gage height, 16.96 ft (5.169 m); minimum daily, 6.8 ft^3/s (0.19 m^3/s) Sept. 29, 30, 1965; minimum gage height, 1.13 ft (0.344 m) Sept. 11, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,830 ft^3/s (137 m^3/s) Mar. 17 at 0130 hours, gage height, 14.78 ft (4.505 m), no other peak above base of 2,400 ft^3/s (68.0 m^3/s); minimum, 31 ft^3/s (0.878 m^3/s) Sept. 21, gage height, 1.24 ft (0.378 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	420	435	472	210	320	1370	218	305	126	130	38
2	227	344	416	500	230	300	1800	205	239	141	96	38
3	286	302	497	600	250	270	1900	196	205	126	82	50
4	413	266	524	800	270	250	1510	185	192	102	78	126
5	439	243	453	1300	290	240	1240	179	166	87	88	242
6	360	237	394	1800	310	250	973	172	345	80	84	199
7	351	272	355	1500	320	280	778	169	1090	75	82	141
8	436	433	341	1100	290	300	650	166	1500	71	66	92
9	565	455	369	720	270	280	741	209	1150	66	60	71
10	509	383	384	560	250	270	830	301	611	64	52	60
11	377	318	338	450	230	250	846	323	391	66	48	52
12	302	272	355	360	220	270	908	249	291	66	48	45
13	253	246	366	310	210	800	843	212	239	66	45	39
14	221	227	359	280	200	1700	874	196	218	110	41	36
15	196	218	341	260	200	2800	1040	189	273	94	39	34
16	175	351	338	250	210	4100	889	175	291	71	36	38
17	163	1100	331	240	220	4670	677	159	222	62	36	50
18	154	1760	312	240	250	3670	623	147	269	56	38	38
19	163	2060	263	230	290	2750	600	135	312	58	41	34
20	172	1700	225	230	360	2260	512	129	218	62	39	34
21	214	1300	259	220	440	1790	464	138	175	150	43	33
22	218	1310	249	220	480	1670	468	147	166	120	46	34
23	208	1130	352	220	500	1770	439	215	150	130	48	36
24	230	843	766	210	490	1710	369	263	135	86	45	34
25	302	631	1310	210	470	1480	323	242	129	64	48	38
26	354	516	1580	210	420	1400	294	202	115	56	89	43
27	534	475	1330	200	380	1430	269	166	110	52	92	43
28	795	546	797	200	350	1280	256	144	110	50	80	60
29	899	697	554	190	---	954	249	141	110	90	64	97
30	835	531	468	190	---	861	235	175	110	250	48	123
31	579	---	416	200	---	1020	---	256	---	190	41	---
TOTAL	11189	19586	15477	14472	8610	41395	22970	6003	9837	2887	1873	1998
MEAN	361	653	499	467	308	1335	766	194	328	93.1	60.4	66.6
MAX	899	2060	1580	1800	500	4670	1900	323	1500	250	130	242
MIN	154	218	225	190	200	240	235	129	110	50	36	33
CFSM	1.03	1.87	1.43	1.34	.88	3.83	2.20	.56	.94	.27	.17	.19
IN.	1.19	2.09	1.65	1.54	.92	4.41	2.45	.64	1.05	.31	.20	.21

CAL YR 1981 TOTAL 146672 MEAN 402 MAX 4300 MIN 36 CFSM 1.15 IN 15.63
WTR YR 1982 TOTAL 156297 MEAN 428 MAX 4670 MIN 33 CFSM 1.23 IN 16.66

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY

LOCATION.--Lat 42°58'40", long 78°45'50", Erie County, Hydrologic Unit 04120104, on right bank 15 ft (5 m) upstream from bridge on State Highway 324 (Sheridan Drive), 0.8 mi (1.3 km) upstream from sewage treatment plant, 1.4 mi (2.3 km) northwest of Williamsville, and 10.8 mi (17.4 km) upstream from mouth.

DRAINAGE AREA.--81.6 mi² (211 km²) revised.

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 586.41 ft (178.738 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Regulation by intermittent pumping from stone quarry into stream upstream from station. Records at medium and high flows may be comparable with those obtained at station 04218500 between October 1955 and September 1972.

AVERAGE DISCHARGE.--10 years, 132 ft³/s (3.738 m³/s), 21.97 in/yr (558 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft³/s (72.2 m³/s) Mar. 5, 1979, gage height, 9.16 ft (2.792 m); maximum gage height, 9.23 ft (2.813 m) Sept. 26, 1977; no flow for part of July 27, 1976, gage height, 0.73 ft (0.222 m) result of pipeline construction.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	1815	1,080	30.6	5.39	1.643
Mar. 14	2245	*1,980	56.1	*7.76	2.365

Minimum discharge, 2.3 ft³/s (0.06 m³/s) Sept.11, gage height, 0.92 ft (0.280 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	117	90	161	94	88	424	56	89	47	22	36
2	71	103	118	246	110	84	265	52	87	39	39	37
3	111	94	143	196	120	82	224	52	86	29	26	133
4	112	86	109	348	120	80	279	53	68	25	53	274
5	96	80	106	852	120	84	182	52	77	22	29	97
6	87	72	97	503	120	96	182	51	437	21	27	56
7	143	128	89	224	120	110	128	48	757	20	22	51
8	164	143	97	133	110	92	143	70	253	21	21	28
9	120	108	136	120	100	84	184	86	120	23	23	25
10	88	84	123	120	92	78	248	94	96	20	20	16
11	71	73	94	110	84	110	213	68	63	18	17	5.8
12	60	67	100	110	78	413	165	58	70	24	16	16
13	37	64	89	100	74	932	140	58	71	20	16	16
14	37	68	90	100	72	1490	209	56	85	17	16	13
15	41	54	102	98	88	1560	169	44	82	17	15	26
16	54	228	106	96	110	895	120	18	66	17	15	18
17	38	737	99	92	130	737	106	18	39	17	15	19
18	50	524	80	88	150	809	103	28	44	19	15	24
19	56	311	67	84	160	464	100	30	52	26	18	19
20	111	217	66	80	170	342	96	43	33	16	29	23
21	90	306	70	76	170	334	99	52	29	16	18	29
22	87	304	61	74	170	356	115	248	45	17	20	29
23	88	184	182	72	160	301	89	235	40	15	25	26
24	146	140	535	70	150	237	78	118	29	15	19	23
25	126	99	492	70	130	204	73	72	28	13	77	23
26	162	94	200	68	120	226	70	56	28	16	85	21
27	395	106	125	68	100	244	45	64	25	20	55	67
28	448	148	114	70	94	159	55	60	32	29	30	82
29	378	114	110	72	---	148	60	89	34	110	23	64
30	202	94	104	74	---	192	60	131	48	72	25	44
31	140	---	92	84	---	286	---	85	---	33	37	---
TOTAL	3887	4947	4086	4659	3316	11317	4424	2245	3013	814	868	1340.8
MEAN	125	165	132	150	118	365	147	72.4	100	26.3	28.0	44.7
MAX	448	737	535	852	170	1560	424	248	757	110	85	274
MIN	37	54	61	68	72	78	45	18	25	13	15	5.8
CFSM	1.53	2.02	1.62	1.84	1.45	4.47	1.80	.89	1.23	.32	.34	.55
IN.	1.77	2.26	1.86	2.12	1.51	5.16	2.02	1.02	1.37	.37	.40	.61

CAL YR 1981 TOTAL 39852.0 MEAN 109 MAX 900 MIN 14 CFSM 1.34 IN 18.17
WTR YR 1982 TOTAL 44916.8 MEAN 123 MAX 1560 MIN 5.8 CFSM 1.51 IN 20.48

04219000 ERIE (BARGE) CANAL AT LOCK 30, MACEDON, NY

LOCATION.--Lat 43°04'20", long 77°17'45", Wayne County, Hydrologic Unit 04140201, on left bank in Macedon, 500 ft (152 m) downstream from headgate in old Erie Canal, 700 ft (213 m) downstream from bridge on State Highway 350, 0.2 mi (0.3 km) downstream from Lock 30, and 2.6 mi (4.2 km) upstream from Ganargua Creek.

PERIOD OF RECORD.--November 1919 to December 1920, October 1977 to current year (navigation seasons only), October 1950 to September 1977. Prior to October 1956, published as "Barge Canal at Lock 30, Macedon."

REVISED RECORDS.--WSP 1237: 1951

GAGE.--Water-stage recorder. Datum of gage is 447.58 ft (136.422 m) National Geodetic Vertical Datum of 1929. Nov. 1, 1919 to Dec. 28, 1920, nonrecording gage at same site at different datum.

REMARKS.--Records good except those for non-navigation season, which are poor. This record represents net diversion from Niagara River basin into Oswego River basin through Erie (Barge) Canal. During the non-navigation period, when the pool upstream from Lock 30 is drained, discharge consists of leakage through guard gates, runoff from small areas tributary to canal upstream from station, or diversion for use downstream in the Canal system.

COOPERATION.--Records of gate openings, lockages, lock-valve openings, and elevations of water surface in Erie (Barge) Canal upstream and downstream from Lock 30 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--27 years (water years 1951-77), 200 ft³/s (5.664 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 874 ft³/s (24.8 m³/s) Dec. 3, 1969; minimum daily, 0.1 ft³/s (0.003 m³/s) many days in March 1982.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	128	1.6			.10	.50	42	246	250	268	259
2	333	134	1.1			.10	.50	51	239	250	263	262
3	346	130	.70			.10	.80	70	245	247	262	269
4	359	134	.40			.20	.50	137	246	265	264	269
5	343	131	.30			.10	.50	161	240	268	266	267
6	338	128	.30			.10	.40	166	237	250	272	285
7	324	129	.40			.10	.40	162	237	244	267	267
8	327	129	.90			.10	.40	169	241	250	265	257
9	320	129	.50			.10	.50	181	246	265	268	258
10	328	136	.50			.10	.70	198	234	256	260	263
11	330	132	.50			.80	.70	193	235	253	258	272
12	329	139	.40			1.5	.80	206	248	262	262	275
13	320	129	.40			2.4	.70	193	244	253	267	273
14	319	139	.40			2.4	.60	200	239	250	268	262
15	320	170	.40			2.6	.60	197	238	250	271	260
16	313	254	.30			2.8	.70	195	240	283	256	254
17	320	186	.30			3.3	.70	205	236	277	264	261
18	314	143	.30			1.6	.60	195	243	283	273	258
19	309	143	.30			1.4	.60	196	244	283	266	277
20	306	201	.30			1.1	.90	196	243	280	273	262
21	311	246	.30			1.0	1.2	205	238	266	263	256
22	314	203	.30			.80	1.2	209	244	282	269	262
23	314	243	1.8			.70	.80	197	241	275	272	265
24	307	298	.70			.60	.80	204	244	275	266	253
25	295	274	.40			.60	.80	204	247	283	271	255
26	305	206	.30			.70	1.2	201	248	276	267	266
27	184	157	.30			.40	1.3	222	248	278	267	255
28	163	111	.30			.40	1.2	243	245	273	279	261
29	163	78	.30			.40	1.4	242	246	270	267	256
30	129	31	.20			.40	6.0	251	239	273	262	263
31	127	---	.20			.50	---	238	---	270	263	---
TOTAL	9149	4791	15.40			27.50	28.00	5729	7261	8240	8259	7902
MEAN	295	160	.50			.89	.93	185	242	266	266	263
MAX	359	298	1.8			3.3	6.0	251	248	283	279	285
MIN	127	31	.20			.10	.40	42	234	244	256	253

04219640 NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY
(National stream-quality accounting network station)

WATER QUALITY RECORDS

LOCATION.--Lat 43°16'10", long 79°03'52", Niagara County, Hydrologic Unit 04120104, water samples collected about 2 mi (3 km) upstream from Coast Guard wharf,and 1.5 mi (2.4 km) south of Youngstown.

DRAINAGE AREA.--265,000 mi² (686,350 km²).

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971 (a), 1973-74 (b), 1975-82 (c).
MINOR ELEMENT DATA: 1971 (a), 1972-82 (b).
ORGANIC DATA: OC--1973 (a), 1974-75 (b), 1978-80 (c), 1981 (b).
NUTRIENT DATA: 1971 (a), 1973-74 (b), 1975-82 (c).
BIOLOGICAL DATA:
Bacteria--1973 (b), 1974 (d), 1975-82 (c).
Phytoplankton--1973 (b), 1974 (d), 1975-77 (c), 1978-81 (c).
Periphyton--1974 (a), 1975-80 (b).
SEDIMENT DATA: 1975-77 (c), 1978 (b), 1979-82 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1973 to June 1980.
WATER TEMPERATURES: September 1973 to June 1980.

REMARKS.--Published in 1971 as "at Youngstown'. Discharge is the daily mean reported for Niagara River at Buffalo (station 04216000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (FTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT												
05...	1300	229000	301	7.7	16.0	2.5	755	10.3	105	400	K20	130
JUN												
07...	1800	240000	286	7.8	9.5	2.1	760	11.4	101	110	K28	120
28...	1400	232000	300	6.7	16.5	2.4	760	9.2	95	38	110	130
JUL												
20...	1400	219000	303	7.9	23.0	1.0	765	9.4	109	110	92	120
AUG												
16...	1430	220000	310	7.8	22.5	2.0	755	9.4	108	K34	50	130
31...	1400	213000	307	7.8	20.0	1.5	770	9.7	105	80	48	130

DATE	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT												
05...	34	38	8.7	12	1.2	97	21	17	.1	.3	170	157
JUN												
07...	27	34	8.0	10	1.4	91	27	15	.1	.1	179	150
28...	31	37	8.4	11	1.0	96	24	15	.2	.1	183	155
JUL												
20...	26	35	7.8	9.5	1.0	94	22	16	.2	.1	163	148
AUG												
16...	33	37	8.6	12	1.2	95	25	15	.2	.3	188	157
31...	31	37	8.5	9.4	1.1	96	25	15	.2	.2	154	154

K Results based on colony count outside the acceptable range (non-ideal colony count).

04219640 - NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT												
05...	.11	.020	.38	<.010	<.010	<.010	--	--	--	--	--	--
JUN												
07...	.32	.030	.20	.030	<.010	<.010	1	1	<100	28	<1	<1
28...	.15	.080	<.10	.030	<.010	<.010	1	1	<100	31	<1	<1
JUL												
20...	.16	.040	.40	.020	<.010	<.010	--	--	--	--	--	--
AUG												
16...	.22	.070	1.00	.020	<.010	.030	1	1	<100	30	1	<1
31...	.12	.030	1.30	.120	<.010	<.010	1	1	<100	<100	1	<1

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT											
05...	--	--	--	--	--	--	--	--	--	--	--
JUN											
07...	10	<10	1	<1	12	6	130	3	2	1	<10
28...	10	10	<1	<1	19	6	180	19	4	<1	10
JUL											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	10	10	2	<1	14	7	100	20	5	2	10
31...	10	10	<1	<1	17	5	130	10	4	3	10

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
05...	--	--	--	--	--	--	--	--	--	--	--
JUN											
07...	1	<.1	<.1	3	3	<1	<1	<1	<1	20	5
28...	2	<.1	<.1	2	2	<1	<1	<1	<1	30	10
JUL											
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	3	.1	<.1	4	4	<1	<1	<1	<1	70	11
31...	<10	<.1	<.1	3	2	<1	<1	<1	<1	20	10

04219640 - NIAGARA RIVER (LAKE ONTARIO) AT FORT NIAGARA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT					
05...	1310	200	3.0	302	16.0
05...	1315	200	10.0	302	16.0
05...	1320	200	20.0	302	16.0
05...	1325	800	3.0	301	16.0
05...	1330	800	10.0	302	15.5
05...	1335	800	25.0	301	15.5
05...	1340	800	40.0	299	15.5
05...	1345	1400	3.0	302	16.0
05...	1350	1400	10.0	302	16.0
05...	1355	1400	20.0	302	15.5
05...	1400	1400	30.0	301	15.5
JUN					
07...	1805	200	3.0	285	10.0
07...	1810	200	10.0	285	10.0
07...	1815	200	20.0	285	10.0
07...	1820	200	30.0	284	10.0
07...	1825	800	3.0	288	9.5
07...	1830	800	10.0	288	9.5
07...	1840	800	20.0	287	10.0
07...	1845	800	40.0	284	9.5
07...	1850	1400	3.0	291	10.0
07...	1855	1400	10.0	288	10.0
07...	1900	1400	20.0	286	10.0
07...	1905	1400	30.0	286	10.0
28...	1405	200	3.0	301	16.5
28...	1410	200	10.0	301	16.5
28...	1415	200	20.0	299	16.5
28...	1420	200	35.0	299	16.5
28...	1425	800	3.0	303	16.5
28...	1430	800	10.0	302	16.5
28...	1435	800	25.0	301	16.5
28...	1440	800	40.0	300	16.5
28...	1445	1400	3.0	305	16.5
28...	1450	1400	10.0	304	16.5
28...	1455	1400	20.0	303	16.5
28...	1500	1400	30.0	303	16.5
JUL					
20...	1405	200	3.0	303	23.0
20...	1410	200	10.0	303	23.0
20...	1415	200	25.0	301	23.0
20...	1420	200	40.0	300	23.0
20...	1425	800	3.0	304	23.0
20...	1430	800	10.0	304	23.0
20...	1435	800	25.0	303	23.0
20...	1440	800	45.0	300	23.0
20...	1445	1400	3.0	304	23.0
20...	1450	1400	7.0	305	23.0
20...	1455	1400	15.0	304	23.0
20...	1500	1400	25.0	304	23.0
AUG					
16...	1435	200	3.0	309	22.5
16...	1440	200	10.0	309	22.5
16...	1445	200	20.0	308	22.5
16...	1450	200	30.0	307	22.5
16...	1455	800	3.0	311	22.5
16...	1500	800	15.0	310	22.5
16...	1505	800	30.0	309	22.5
16...	1510	800	45.0	306	22.5
16...	1515	1400	3.0	310	22.5
16...	1520	1400	10.0	309	22.5
16...	1525	1400	20.0	308	22.5
16...	1530	1400	30.0	307	22.5
31...	1435	200	3.0	308	20.0
31...	1440	200	10.0	308	20.0
31...	1445	200	20.0	307	20.0
31...	1450	200	30.0	306	20.0
31...	1455	800	3.0	307	20.0
31...	1500	800	10.0	307	20.0
31...	1505	800	25.0	306	20.0
31...	1510	800	45.0	305	20.0
31...	1515	1400	3.0	307	20.0
31...	1520	1400	10.0	307	20.0
31...	1525	1400	20.0	307	20.0
31...	1530	1400	30.0	306	20.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	DISCHARGE, IN CUBIC FEET PER SECOND	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT				
05...	1300	229000	6	3710
JUN				
07...	1800	240000	5	3240
28...	1400	232000	5	3130
JUL				
20...	1400	219000	4	2370
AUG				
16...	1430	220000	3	1780
31...	1400	213000	3	1730

04221000 GENESEE RIVER AT WELLSVILLE, NY

LOCATION.--Lat 42°07'20", long 77°57'27", Allegany County, Hydrologic Unit 04130002, on left bank 35 ft (11 m) upstream from concrete weir at Wellsville, 0.5 mi (0.8 km) upstream from bridge on State Highway 17, 0.6 mi (1.0 km) upstream from Crowner Brook and sewage treatment plant, 0.6 mi (1.0 km) downstream from Dyke Creek, and 140.9 mi (227 km) upstream from mouth.

DRAINAGE AREA.--288 mi² (746 km²) revised.

PERIOD OF RECORD.--August 1955 to September 1958, October 1972 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,470.00 ft (448.056 m) National Geodetic Vertical Datum of 1929. October 1957 to September 1958, nonrecording gage at site 0.4 mi (0.6 km) upstream at datum 3.00 ft (0.91 m) higher. August 1955 to September 1957, at same site at datum 8.00 ft (2.438 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Record for station 04221500 Genesee River at Scio, 5.2 mi (8.4 km) downstream, published for June 1916 to September 1972.

AVERAGE DISCHARGE.--13 years (water years 1956-58, 1973-82), 411 ft³/s (11.64 m³/s), 19.31 in/yr (490 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s (447 m³/s) Mar. 8, 1956 (site and datum then in use, from graph based on gage readings) and Oct. 28, 1981 (present site and datum); maximum gage height, 13.60 ft (4.145 m) October 28, 1981; minimum daily, 18 ft³/s (0.51 m³/s) Sept. 9, 1957.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since before June 1916, 38,500 ft³/s (1,090 m³/s) June 23, 1972, gage height, 20.7 ft (6.31 m) present datum, from floodmark, on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	0030	*15,800	447	*13.60	4.145	June 5	2200	5,370	152	9.12	2.800
Mar. 13	2000	5,220	148	9.03	2.752	June 17	0600	4,460	126	8.57	2.612
Mar. 26	0430	3,730	106	8.09	2.466	June 29	1330	7,550	214	10.27	3.130

Minimum discharge, 28 ft³/s (0.79 m³/s) Sept. 13, 14, 19, 20, 21, gage height, 4.27 ft (1.301 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	637	285	260	520	130	2080	177	225	854	82	37
2	264	526	313	290	500	130	1250	179	358	606	75	56
3	153	437	316	360	490	110	1290	180	224	499	74	57
4	128	377	284	600	760	100	1280	160	236	445	86	47
5	107	341	278	865	500	96	935	141	1760	357	87	41
6	153	733	248	519	390	94	820	133	3490	297	70	38
7	322	515	239	490	330	94	580	126	1650	258	62	35
8	435	423	300	350	280	92	560	647	1060	278	61	33
9	273	377	280	310	250	90	540	641	764	209	86	33
10	212	337	240	280	220	110	569	368	602	176	99	32
11	179	324	240	270	180	130	625	308	541	161	77	31
12	154	295	230	260	170	400	559	277	414	169	66	30
13	134	265	210	250	170	2400	625	254	367	139	61	29
14	121	251	206	240	160	2780	608	221	319	122	59	29
15	109	299	205	220	160	1640	520	197	265	117	56	34
16	101	964	199	180	680	1240	512	180	550	106	52	35
17	92	578	188	170	1010	1170	545	166	2650	100	51	30
18	95	562	160	170	580	1060	521	152	918	130	56	30
19	105	538	140	170	400	1160	433	149	656	117	49	29
20	100	1810	130	170	320	1070	392	207	556	169	58	29
21	88	952	120	160	300	1640	409	158	451	157	71	29
22	81	747	140	160	260	1570	341	296	385	118	55	38
23	162	617	660	150	230	1250	306	550	361	87	47	47
24	158	534	618	150	210	1410	283	453	293	80	53	38
25	123	462	410	150	170	1620	256	344	248	73	49	36
26	126	404	350	140	160	2860	254	284	219	67	49	40
27	4170	450	350	140	150	1510	259	248	204	66	43	98
28	7390	390	330	130	140	1050	229	342	250	409	39	62
29	1840	344	300	120	---	891	203	384	4180	204	38	49
30	1100	302	250	120	---	849	187	271	1850	114	37	43
31	806	---	240	180	---	1600	---	252	---	93	36	---
TOTAL	19449	15791	8459	8024	9690	30346	17971	8445	26046	6777	1884	1195
MEAN	627	526	273	259	346	979	599	272	868	219	60.8	39.8
MAX	7390	1810	660	865	1010	2860	2080	647	4180	854	99	98
MIN	81	251	120	120	140	90	187	126	204	66	36	29
CFSM	2.18	1.83	.95	.90	1.20	3.40	2.08	.94	3.01	.76	.21	.14
IN.	2.51	2.04	1.09	1.04	1.25	3.92	2.32	1.09	3.36	.88	.24	.15

CAL YR 1981 TOTAL 127022 MEAN 348 MAX 7390 MIN 30 CFSM 1.21 IN 16.41
WTR YR 1982 TOTAL 154077 MEAN 422 MAX 7390 MIN 29 CFSM 1.47 IN 19.90

04221990 RUSHFORD LAKE AT CANEADEA DAM, NY

04221991 CANEADEA CREEK AT CANEADEA DAM, NY

LOCATION.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit 04130002, in control structure of Caneadea Dam at outlet of Rushford Lake, and 2.4 mi (3.9 km) upstream from mouth.

DRAINAGE AREA.--61.2 mi^2 (159 km^2) revised.

PERIOD OF RECORD.--October 1968 to September 1982 (discontinued). July 1928 to April 1981 in files of Rochester Gas and Electric Corp. May 1981 to current year in files of Rushford Lake Recreation District.

GAGE.--Water-stage recorder. Elevation of gage is 1,440 ft (439 m) National Geodetic Vertical Datum of 1929 (furnished by Rochester Gas and Electric Corp.).

REMARKS.--Outflow from Rushford Lake (capacity, 1,106 mil ft^3 or 31.3 hm^3) used for power generation. Discharge computed by orifice and (or) weir formula. Flow regulated by gates at dam completed in 1928. Area of water surface, 0.89 mi^2 (2.31 km^2). Daily discharge record at a site 2 miles (3.2 km) downstream is published for July 1949 to September 1968 as station 04222000 Caneadea Creek at Caneadea, NY.

AVERAGE DISCHARGE.--14 years, 89.0 ft^3/s (2.52 m^3/s), 19.75 in/yr (502 mm/yr), unadjusted.

MONTHEND ELEVATION, CONTENTS, AND MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCT. 1981 TO SEPT. 1982.

	04221990 RUSHFORD LAKE			04221991 CANEADEA CREEK AT CANEADEA DAM			
	*Elevation FT	Contents FT^3	Change in contents FT^3/s	Observed discharge MEAN	†Adjusted for change in contents in Rushford Lake MEAN	CFSM	IN.
October	1,421.3	710.64	- 69.6	230	161	2.63	3.03
November	1,411.7	553.91	- 60.5	140	79.5	1.30	1.45
December	1,406.2	474.16	- 29.8	118	88.0	1.44	1.66
CAL YR 1981			+ 2.52	77.0	79.5	1.30	17.63
January	1,384.7	226.89	- 92.3	166	73.3	1.20	1.38
February	1,396.0	344.65	+ 48.7	0	48.7	.80	.83
March	1,426.3	803.87	+171	85.2	257	4.20	4.84
April	1,435.3	993.43	+ 73.1	85.4	159	2.60	2.89
May	1,439.3	1,089.24	+ 35.8	0	35.8	.58	.67
June	1,440.6	1,120.44	+ 12.0	108	120	1.96	2.19
July	1,440.3	1,113.18	- 2.71	11.0	8.26	.13	.16
August	1,440.1	1,108.34	- 1.81	7.13	5.32	.09	.10
September	1,415.7	615.77	-190	245	55.1	.90	1.00
WTR YR 1982			- 8.92	99.9	91.0	1.49	20.19

*Elevation at 2400 hours on last day of month.
†Adjustments by Geological Survey.

NOTE.--All figures of contents expressed in millions.

04223000 GENESEE RIVER AT PORTAGEVILLE, NY

LOCATION.--Lat 42°34'13", long 78°02'33", Wyoming County, Hydrologic Unit 04130002, on left bank at Portageville, 500 ft (152 m) downstream from bridge on State Highway 436, 800 ft (244 m) upstream from abandoned railroad bridge piers, 0.9 mi (1.4 km) upstream from Upper Falls, and 89.8 mi (144 km) upstream from mouth.

DRAINAGE AREA.--984 mi^2 (2,549 km^2) revised.

PERIOD OF RECORD.--August 1908 to current year. Prior to December 1945, published as "at St. Helena". Records published for both sites December 1945 to September 1950.

REVISED RECORDS.--WSP 264: 1908. WSP 564: 1916(M). WSP 2112: Drainage area. WRD NY 1972: 1950(M), 1951(M), 1956(M), 1959(M), 1964(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,080.00 ft (329.184 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 24, 1911, nonrecording gage and Aug. 24, 1911 to Sept. 30, 1946, water-stage recorder at site 8 mi (13 km) downstream at different datum. Oct. 1, 1946 to June 21, 1972, water-stage recorder at site 1,200 ft (366 m) downstream at datum 2.60 ft (0.792 m) higher (destroyed by flood of June 1972). July 12, 1972 to May 18, 1973, nonrecording gage at site 500 ft (152 m) upstream at datum 11.48 ft (3.499 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor. Since July 1928, some seasonal regulation by Rushford Lake. Diurnal fluctuation at low flow caused by powerplant. Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake.

AVERAGE DISCHARGE.--74 years (water years 1909-82), 1,254 ft^3/s (35.51 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 90,000 ft^3/s (2,550 m^3/s) June 23, 1972, gage height, 35.25 ft (10.744 m) site and datum then in use, from high-water mark, from rating curve extended above 25,000 ft^3/s (708 m^3/s) on basis of contracted-opening measurement of 71,000 ft^3/s (2,010 m^3/s) at highway bridge 0.4 mi (0.6 km) upstream and contracted-opening measurement of 98,200 ft^3/s (2,780 m^3/s) 0.7 mi (1.1 km) downstream from gage; minimum, 18 ft^3/s (0.51 m^3/s) Oct. 5, 17, 1913, gage height, 1.70 ft (0.518 m) site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft^3/s (425 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Oct. 28	2100	*24,000	680	18.42	5.614	June 6	0830	23,800	674	*18.51	5.642
Mar. 13	2300	ice jam		17.11	5.215						

Minimum discharge, 90 ft^3/s (2 55 m^3/s) Sept. 15, gage height, 8.26 ft (2.518 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	1730	1250	700	600	390	9100	560	758	2150	319	141
2	2750	1440	1310	760	700	360	4900	531	1660	1350	251	206
3	2000	1200	1200	760	800	330	4390	502	934	1030	226	356
4	1390	1010	1040	1800	1000	310	5770	476	645	889	231	329
5	1130	870	989	4390	1900	290	3400	446	2460	783	400	200
6	1230	1640	1430	2000	1400	270	2900	420	17100	652	354	137
7	2420	2470	1260	1500	940	270	2400	402	6260	557	300	140
8	3320	2010	1390	1200	820	260	1900	665	3530	511	206	135
9	1680	1780	1450	1000	720	250	1800	2990	2280	511	214	128
10	1040	1580	800	880	620	250	1900	1430	1690	424	275	122
11	778	1470	700	820	540	250	3140	880	1510	371	281	118
12	778	891	900	780	500	270	2840	729	1250	487	223	114
13	1040	934	956	720	460	3800	3820	654	1050	402	196	107
14	818	1270	902	660	430	11400	4260	583	1210	350	169	104
15	430	1100	828	640	400	7380	3290	524	872	369	147	153
16	541	4130	636	600	800	5890	2960	468	978	281	151	234
17	880	3620	591	560	2000	6980	2830	438	7040	256	217	133
18	748	2440	540	540	1900	5340	2560	408	3510	264	170	120
19	423	1980	440	520	1400	5360	1980	387	1850	286	135	108
20	516	5400	400	500	1000	4390	1670	416	1460	476	139	281
21	446	4010	380	470	900	6880	1550	476	1190	587	144	1140
22	394	2600	410	450	800	7420	1370	423	1080	463	161	869
23	549	1980	3000	420	720	5610	1150	978	993	302	150	225
24	1180	1670	3640	400	620	6100	1200	387	842	243	138	200
25	1260	1470	1800	380	560	6830	1090	967	621	215	137	1100
26	1130	1250	1200	370	500	9850	923	700	546	199	142	1180
27	4050	1600	1100	350	450	6340	812	591	507	187	135	1430
28	17600	1870	1100	330	420	4280	762	719	537	632	130	1490
29	7370	1540	956	320	---	3480	674	2080	2820	1360	119	973
30	3480	1360	839	310	---	3270	606	1010	5860	615	114	251
31	2260	---	640	370	---	6270	---	808	---	433	121	---
TOTAL	64084	58315	34077	25500	23900	120370	77947	23048	73043	17635	6095	12224
MEAN	2067	1944	1099	823	854	3883	2598	743	2435	569	197	407
MAX	17600	5400	3640	4390	2000	11400	9100	2990	17100	2150	400	1490
MIN	394	870	380	310	400	250	606	387	507	187	114	104

CAL YR 1981 TOTAL 455887 MEAN 1249 MAX 17600 MIN 110
WTR YR 1982 TOTAL 536238 MEAN 1469 MAX 17600 MIN 104

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°44'00", long 77°54'40", Livingston County, Hydrologic Unit 04130002, at Mount Morris Dam on Genesee River, 2.0 mi (3.2 km) northwest of Mount Morris, 5 mi (8 km) upstream from Canaseraga Creek, and 69.3 mi (112 km) upstream from mouth.

DRAINAGE AREA.--1,080 mi² (2,797 km²) revised.

PERIOD OF RECORD.--January 1952 to current year. Prior to October 1970, published as "Mount Morris Reservoir near Mount Morris."

REVISED RECORDS.--WSP 1437: 1955. WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 8, 1952, reference point at same site and datum.

REMARKS.--Lake is formed by a concrete gravity-type dam with overflow spillway, completed by Corps of Engineers in 1951 for flood control; first used for flood regulation on Nov. 24, 1951. Usable capacity, 336,800 acre-ft (415 hm³) between elevation 585.0 ft (178.31 m), sill of conduits, and 760.0 ft (231.65 m), crest of spillway. Dead storage, 609 acre-ft (751,000 m³). Discharge is controlled by the operation of nine gates. Water is stored during high flows and released when downstream conditions warrant.

COOPERATION.--Records furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 755.46 ft (230.264 m) June 25, 1972, contents, 322,600 acre-ft (398 hm³); minimum, 584.23 ft (178.073 m) Sept. 2, 1976, contents, 475.8 acre-ft (587,000 m³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 660.89 ft (201.439 m) Mar. 19, contents, 79,980 acre-ft (98.6 hm³); minimum, 584.36 ft (178.113 m) July 24-25, contents, 498.3 acre-ft (614,400 m³).

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Furnished by Corps of Engineers in 1953)

584.00	436	600.00	5,610	640.00	43,700
586.00	782	605.00	8,250	660.00	78,200
588.00	1,210	610.00	11,600	680.00	119,800
590.00	1,730	620.00	19,800	700.00	166,300
595.00	3,410	630.00	30,500	730.00	245,200
				750.00	305,100

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	604.32	640.91	601.50	621.27	598.54	601.16	639.20	589.38	594.62	600.15	587.47	585.87
2	608.16	634.77	599.53	620.89	600.31	597.85	639.71	589.35	594.89	589.58	586.94	586.14
3	610.27	627.78	599.57	620.49	603.79	595.10	636.71	589.31	593.50	589.07	586.96	587.06
4	608.41	620.32	596.60	620.68	606.59	594.05	635.23	589.28	590.91	588.54	587.14	587.08
5	605.69	612.19	595.40	626.93	610.16	594.11	632.89	589.23	591.72	588.20	587.66	586.77
6	606.27	604.57	597.89	630.62	612.69	594.09	629.57	589.07	628.52	587.98	588.14	586.11
7	609.12	604.39	598.38	631.92	613.36	594.08	624.07	588.89	642.12	587.80	587.91	586.03
8	613.52	604.49	598.04	632.47	612.73	594.01	618.35	588.85	640.97	587.66	587.46	586.03
9	612.66	602.24	600.09	632.32	611.90	593.92	613.93	601.79	636.37	587.52	587.19	586.02
10	606.89	597.86	596.95	631.90	610.87	593.89	609.72	601.59	630.38	587.38	587.40	586.01
11	602.06	595.12	594.36	630.72	609.21	594.08	608.97	591.09	623.71	587.28	587.19	586.01
12	601.08	593.45	596.72	629.19	607.22	597.84	609.46	588.98	615.99	587.19	586.47	586.01
13	601.83	591.90	596.86	628.07	605.00	608.10	610.03	589.01	607.44	587.13	586.13	585.99
14	603.07	595.34	596.21	627.26	602.15	634.32	614.30	600.78	598.61	587.08	586.06	585.93
15	600.85	595.33	595.22	626.24	597.14	646.86	613.90	597.06	593.59	587.03	585.97	585.96
16	595.70	601.01	594.63	625.22	594.75	652.55	611.31	591.11	592.31	587.00	585.90	586.42
17	600.45	616.85	595.77	624.24	600.68	656.96	609.59	590.66	607.69	586.99	585.99	586.25
18	604.42	617.83	596.26	622.94	608.38	660.24	608.01	590.35	618.67	587.44	586.20	586.01
19	605.26	616.29	595.02	621.60	610.99	660.77	604.64	590.03	615.72	587.59	585.98	586.01
20	605.18	615.77	594.99	620.36	611.48	659.79	597.13	589.87	609.49	587.52	585.94	586.01
21	605.35	623.50	595.93	619.01	611.37	658.22	594.50	590.95	599.84	587.56	585.90	588.11
22	605.01	623.12	597.42	616.96	610.99	658.98	599.53	590.46	593.41	587.50	585.90	589.19
23	604.59	620.48	601.22	614.72	610.39	657.80	606.89	592.45	593.08	587.37	585.90	589.18
24	606.18	616.45	618.68	612.44	609.61	655.24	598.64	595.61	594.78	586.06	585.88	589.08
25	607.38	611.36	623.07	609.62	608.56	652.85	592.19	594.76	603.77	585.31	585.87	589.00
26	608.16	606.73	624.05	606.78	607.12	652.93	591.47	593.60	604.49	586.13	585.87	589.08
27	607.82	604.06	624.07	605.09	605.39	654.46	590.65	592.46	595.89	586.37	585.87	589.71
28	627.85	605.43	624.01	603.57	603.49	651.14	590.43	592.39	590.13	586.59	585.87	590.16
29	646.35	605.61	623.71	601.87	---	645.83	589.77	599.88	591.03	590.49	585.87	589.69
30	648.31	604.21	623.14	599.91	---	639.66	589.43	600.31	613.06	588.73	585.86	587.80
31	646.03	---	622.22	598.55	---	635.43	---	594.45	---	587.96	585.85	---
MEAN	610.27	610.31	603.79	619.80	606.96	628.59	610.34	592.68	606.89	587.94	586.48	587.16
MAX	648.31	640.91	624.07	632.47	613.36	660.77	639.71	601.79	642.12	600.15	588.14	590.16
MIN	595.70	591.90	594.36	598.55	594.75	593.89	589.43	588.85	590.13	585.31	585.85	585.87
†	49,410	7,238	21,480	4,799	6,909	38,230	1,574	3,087	12,500	1,132	757.8	1,132
††	+671	-709	+232	-271	+38.0	+509	-616	+24.6	+158	-185	-6.09	+6.29

CAL YR 1981 MEAN 606.49 MAX 701.81 MIN 586.36 †† +24.4
WTR YR 1982 MEAN 604.25 MAX 660.77 MIN 585.31 †† -9.67

† Contents, in acre-feet, at end of month.
†† Change in contents, equivalent in cubic feet per second.

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY

LOCATION.--Lat 42°32'08", long 77°42'16", Livingston County, Hydrologic Unit 04130002, on right bank on Poags Hole Road, 0.7 mi (1.1 km) upstream from Stony Brook, and 1.7 mi (2.7 km) south of Dansville.

DRAINAGE AREA.--88.9 mi² (230 km²) revised.

PERIOD OF RECORD.--August 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 715.60 ft (218.115 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--8 years, 104 ft³/s (2.945 m³/s), 15.89 in/yr (404 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,870 ft³/s (81.3 m³/s) Sept. 20, 1977, gage height, 5.51 ft (1.679 m); minimum discharge, 7.4 ft³/s (0.21 m³/s) Sept. 11, 1975; minimum gage height, 0.70 ft (0.213 m) several days in August, September, and October 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	0430	1,450	41.1	3.81	1.161	June 6	0030	*2,210	62.6	*4.49	1.369
Mar. 13	1545	1,380	39.1	3.66	1.116						

Minimum discharge, 11 ft³/s (0.31 m³/s), Sept. 13, 14, gage height, 0.81 ft (0.247 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	94	65	50	170	37	470	54	40	54	21	14
2	90	81	73	52	160	35	272	50	75	40	21	15
3	76	72	70	58	150	33	257	47	50	35	21	16
4	57	64	64	170	240	32	282	45	42	34	23	16
5	49	58	62	163	190	46	182	43	442	30	23	14
6	70	87	56	100	150	36	142	42	1280	26	20	14
7	173	94	55	82	120	36	159	40	482	25	19	14
8	140	73	65	68	98	31	142	190	257	25	19	14
9	86	65	67	60	82	31	132	167	145	23	20	13
10	70	58	62	56	70	32	149	83	104	23	22	13
11	60	54	64	54	64	43	207	67	91	23	19	12
12	53	49	62	50	60	375	224	61	70	31	18	12
13	49	45	55	49	54	831	369	55	65	23	18	12
14	47	43	54	47	52	671	312	50	72	22	17	12
15	44	43	54	46	50	436	233	46	56	22	16	19
16	42	436	54	45	358	348	216	43	96	21	16	17
17	40	190	49	44	386	507	199	40	298	21	15	14
18	38	152	48	44	207	364	163	37	114	21	14	13
19	44	123	43	43	123	337	123	37	79	21	14	13
20	46	425	40	42	91	327	109	37	65	45	16	13
21	42	199	37	41	81	565	106	34	55	34	15	13
22	39	156	45	40	70	494	87	40	46	23	15	15
23	70	123	257	39	64	380	79	51	46	21	15	17
24	68	106	145	38	55	391	75	46	40	20	15	16
25	53	96	94	37	50	408	70	39	36	19	15	15
26	51	83	84	36	46	637	68	35	34	18	14	14
27	317	94	76	35	43	322	70	32	36	19	14	29
28	736	85	68	35	39	220	64	46	43	54	13	25
29	233	77	62	34	---	190	61	73	89	43	13	20
30	152	68	56	34	---	203	55	44	83	25	13	18
31	117	---	54	34	---	482	---	38	---	22	14	---
TOTAL	3209	3393	2140	1726	3323	8880	5077	1712	4431	863	528	462
MEAN	104	113	69.0	55.7	119	286	169	55.2	148	27.8	17.0	15.4
MAX	736	436	257	170	386	831	470	190	1280	54	23	29
MIN	38	43	37	34	39	31	55	32	34	18	13	12
CFSM	1.17	1.27	.78	.63	1.34	3.22	1.90	.62	1.67	.31	.19	.17
IN.	1.34	1.42	.90	.72	1.39	3.72	2.12	.72	1.85	.36	.22	.19

CAL YR 1981 TOTAL 30576 MEAN 83.8 MAX 1060 MIN 15 CFSM .94 IN 12.79
WTR YR 1982 TOTAL 35744 MEAN 97.9 MAX 1280 MIN 12 CFSM 1.10 IN 14.96

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY

LOCATION.--Lat 42°44'13", long 77°50'27", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft (30 m) upstream from bridge on State Highway 408 at Shakers Crossing, 1.4 mi (2.3 km) upstream from mouth, and 1.5 mi (2.4 km) northeast of Mount Morris (revised).

DRAINAGE AREA.--335 mi^2 (868 km^2) revised.

PERIOD OF RECORD.--July 1915 to September 1922 (gage height only), November 1958 to September 1970, October 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 545.52 ft (166.274 m) National Geodetic Vertical Datum of 1929. Prior to July 1981 at site 250 ft (76 m) east on left bank of old filled-in channel at same datum and prior to November 1958 at site 250 ft (76 m) east and 40 ft (12 m) north at datum 5.52 ft (1.682 m) lower. April 1968 to September 1970, and since October 1974, auxiliary water-stage recorder 0.6 mi (1.0 km) downstream from base gage.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--19 years (water years 1960-70, 1975-82), 291 ft^3/s (8.241 m^3/s), 11.80 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,270 ft^3/s (149 m^3/s) Mar. 4, 1976, gage height, 13.33 ft (4.063 m); maximum gage height, 23.62 ft (7.199 m) present datum, May 17, 1916 (backwater from Genesee River); minimum discharge, 4.3 ft^3/s (0.12 m^3/s) Aug. 19, 1970, gage height, 2.26 ft (0.689 m), result of temporary regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972 reached an estimated discharge of 11,200 ft^3/s (317 m^3/s), from Corps of Engineers publication (Tropical Storm Agnes, June 1972).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 16	1430	3,270	92.6	10.33	3.149	June 6	0445	4,200	119	11.47	3.496
Mar. 13	2130	*a4,400	125	*b12.93	3.941						

a About.
b Backwater from Genesee River.

Minimum discharge, 32 ft^3/s (0.91 m^3/s) Sept. 14, gage height, 3.49 ft (1.064 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	322	237	180	120	180	1700	167	112	514	63	51
2	328	269	261	170	250	170	876	164	222	179	58	50
3	318	257	254	170	400	150	704	156	149	120	60	65
4	250	205	229	460	751	140	936	149	120	120	72	51
5	187	196	222	838	595	130	612	141	328	105	83	44
6	187	315	205	400	413	130	503	137	3370	98	65	42
7	435	345	191	330	350	120	480	128	1940	86	58	43
8	421	273	229	270	310	120	460	273	998	95	57	44
9	367	233	250	240	270	110	480	591	665	76	65	39
10	281	209	205	230	240	110	668	294	500	71	69	39
11	218	196	205	220	220	300	952	209	309	71	58	36
12	191	179	218	210	200	1500	820	183	256	86	52	36
13	171	164	200	200	190	2500	994	171	222	86	51	36
14	128	160	196	190	180	3230	1030	156	294	76	50	35
15	116	156	196	180	180	2170	608	141	191	72	48	76
16	116	1550	200	170	450	1620	500	128	196	67	47	62
17	109	1430	191	170	741	1960	463	124	670	65	47	47
18	102	877	160	160	566	1560	414	112	320	65	50	40
19	109	562	130	160	481	1300	340	109	185	63	44	40
20	120	1590	120	150	448	973	318	116	162	76	44	37
21	109	1200	120	150	512	1530	322	120	161	137	48	37
22	98	677	140	140	548	1680	277	105	160	76	46	43
23	164	490	900	140	447	1140	257	156	160	67	46	48
24	250	400	990	140	420	981	246	146	137	62	44	47
25	164	354	477	130	327	1100	218	124	116	58	43	43
26	156	336	355	130	280	1830	214	109	112	52	44	46
27	630	353	322	130	230	1210	225	98	116	51	37	74
28	1870	345	306	130	200	627	209	128	137	98	37	92
29	1180	306	288	120	---	552	187	257	331	187	37	60
30	633	254	250	120	---	599	175	146	494	83	37	51
31	433	---	209	120	---	1050	---	124	---	71	42	---
TOTAL	9965	14203	8456	6548	10319	30772	16188	5162	13133	3133	1602	1454
MEAN	321	473	273	211	369	993	540	167	438	101	51.7	48.5
MAX	1870	1590	990	838	751	3230	1700	591	3370	514	83	92
MIN	98	156	120	120	120	110	175	98	112	51	37	35
CFSM	.96	1.41	.82	.63	1.10	2.96	1.61	.50	1.31	.30	.15	.15
IN.	1.11	1.58	.94	.73	1.15	3.42	1.80	.57	1.46	.35	.18	.16

CAL YR 1981 TOTAL 94829 MEAN 260 MAX 2350 MIN 45 CFSM .78 IN 10.53
WTR YR 1982 TOTAL 120935 MEAN 331 MAX 3370 MIN 35 CFSM .99 IN 13.43

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°46'00", long 77°50'21", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft (30 m) north of Jones Bridge Road, 0.8 mi (1.3 km) downstream from Canaseraga Creek, 2.8 mi (4.5 km) northeast of Mount Morris, and 63.0 mi (101 km) upstream from mouth.

DRAINAGE AREA.--1,424 mi^2 (3,688 km^2) revised.

PERIOD OF RECORD.--May 1903 to April 1906, August 1908 to April 1914, July 1915 to current year. Prior to 1968, published as "at Jones Bridge."

REVISED RECORDS.--WSP 1277: 1952. WSP 1387: 1913. WSP 1437: 1955. WSP 2112: Drainage area.
WDR NY-78-1: 1974-77 (M, m).

GAGE.--Water-stage recorder. Datum of gage is 540.12 ft (164.629 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 11, 1915, nonrecording gage on bridge at datum 2.85 ft (0.869 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake (see station 04221991) since July 1928, and at high flows since November 1951 by Mount Morris Lake (see station 04224000). Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--72 years (water years 1909-13, 1916-82), 1,662 ft^3/s (47.07 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,100 ft^3/s (1,560 m^3/s) May 17, 1916, gage height, 25.44 ft (7.754 m); minimum, 12 ft^3/s (0.34 m^3/s) July 23, 1955, gage height, 0.22 ft (0.067 m), partially obstructed intake; minimum daily, 30 ft^3/s (0.85 m^3/s) Aug. 8, 1909.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,300 ft^3/s (292 m^3/s) Mar. 26, gage height, 15.27 ft (4.654 m); minimum, 42 ft^3/s (1.19 m^3/s) Sept. 14, gage height, 1.33 ft (0.405 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	673	6970	2010	1500	780	1100	7930	840	1070	5550	463	206
2	1640	6570	1760	1500	1000	1000	7390	794	1480	1900	371	245
3	2650	5770	1790	1500	1500	900	7000	748	1520	1370	345	409
4	2510	4570	1620	1830	1700	800	7090	717	935	1130	359	419
5	1860	3440	1410	2420	1600	740	6360	679	1030	1020	420	361
6	1290	2850	1580	1900	1500	700	5950	637	6450	870	482	238
7	1990	2850	1680	1800	1400	800	5850	608	6720	730	420	199
8	2790	2760	1670	1700	1300	720	5010	787	7240	674	351	196
9	3430	2570	1850	1500	1200	700	4220	2430	6920	630	322	185
10	2880	2270	1590	1400	1100	700	3880	2660	6160	559	343	178
11	1680	1860	1120	1300	1100	1100	3840	1540	5200	486	377	172
12	1170	1500	1380	1200	1100	2900	3730	1140	4320	516	347	165
13	1150	1090	1460	1100	1000	6200	3860	979	3190	579	302	138
14	1130	1510	1360	1100	1000	8800	4380	480	2480	453	279	112
15	1080	1510	1290	1000	1000	5000	4290	1200	1460	451	263	273
16	794	3240	1070	1000	1100	3670	3990	717	1190	414	192	283
17	567	4470	909	960	1600	4500	3390	643	3070	381	224	269
18	625	3890	902	940	1500	5610	3260	602	4010	370	301	182
19	649	3750	840	920	1500	6350	3000	556	3700	359	217	169
20	655	4870	820	900	1600	6970	2430	545	3340	469	206	182
21	655	5070	860	880	1700	8510	1850	630	2670	746	206	801
22	637	4500	944	860	1800	8950	1100	591	1400	639	203	1130
23	692	4140	1960	860	1700	8770	1090	810	1310	457	217	465
24	1110	3870	2510	840	1600	9280	2480	1450	978	362	217	323
25	1290	3450	1950	840	1400	9760	1460	1320	248	332	189	682
26	1420	2630	1800	820	1300	9740	1350	980	836	286	189	1210
27	2340	2250	1740	820	1200	8950	1220	799	1290	283	189	1440
28	4560	2270	1710	800	1200	8890	1170	775	702	376	185	1470
29	5720	2240	1680	800	---	8950	1020	1680	1090	1670	175	1380
30	4600	2140	1610	800	---	8450	909	1790	4730	883	166	485
31	6160	---	1600	780	---	7670	---	1170	---	585	172	---
TOTAL	60397	100870	46475	36570	37480	157180	110499	31297	86739	25530	8692	14017
MEAN	1948	3362	1499	1180	1339	5070	3683	1010	2891	824	280	467
MAX	6160	6970	2510	2420	1800	9760	7930	2660	7240	5550	482	1470
MIN	567	1090	820	780	780	700	909	480	248	283	166	112

CAL YR 1981 TOTAL 620287 MEAN 1699 MAX 9410 MIN 121
WTR YR 1982 TOTAL 715746 MEAN 1961 MAX 9760 MIN 112

04227980 CONESUS LAKE NEAR LAKEVILLE, NY

LOCATION.--Lat 42°47'39", long 77°43'15", Livingston County, Hydrologic Unit 04130003, on west shore of Conesus Lake at Geneseo Water Works pumping station, 300 ft (91 m) east of State Highway 256, and 3.0 mi (4.8 km) south of Lakeville.

DRAINAGE AREA.--69.8 mi² (181 km²) revised.

PERIOD OF RECORD.--July 1963 to current year. Since 1930 in files of village of Geneseo.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Oct. 1, 1970 to Sept. 30, 1975, at datum 800.00 ft (243.840 m) higher. Prior to Oct. 1, 1970, nonrecording gage at site 200 ft (61 m) downstream at datum 796.59 ft (242.801 m) higher.

REMARKS.--Lake level maintained by plank and pile dam at outlet. Area of water surface, 5.08 mi² (13.2 km²). Daily average of about 2 ft³/s (0.057 m³/s) diverted from lake for water supply for Avon, Geneseo, and Lakeville Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 822.50 ft (250.698 m) June 24, 1972; minimum observed, 816.33 ft (248.817 m) present datum, Nov. 3-8, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 819.15 ft (249.677 m) Mar. 27; minimum, 817.10 ft (249.052 m) Mar. 10-11.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	817.95	817.74	818.21	817.84	817.38	817.20	819.09	818.43	818.43	818.38	818.03	817.49
2	817.95	817.75	818.19	817.81	817.36	817.19	819.07	818.43	818.46	818.36	818.02	817.51
3	817.95	817.73	818.17	817.80	817.36	817.19	819.07	818.41	818.44	818.34	818.00	817.57
4	817.95	817.71	818.15	817.83	817.35	817.18	819.09	818.39	818.44	818.31	817.99	817.54
5	817.90	817.68	818.11	817.89	817.34	817.17	819.08	818.38	818.45	818.30	817.96	817.52
6	817.87	817.69	818.07	817.92	817.33	817.16	819.04	818.38	818.60	818.28	817.94	817.50
7	817.91	817.70	818.04	817.95	817.31	817.16	819.02	818.38	818.65	818.27	817.92	817.49
8	817.90	817.69	818.03	817.93	817.29	817.15	819.00	818.42	818.65	818.28	817.91	817.47
9	817.90	817.68	818.02	817.91	817.28	817.13	818.97	818.45	818.61	818.26	817.90	817.45
10	817.80	817.67	817.99	817.88	817.27	817.12	818.94	818.47	818.52	818.24	817.90	817.43
11	817.80	817.64	817.98	817.84	817.25	817.12	818.93	818.47	818.49	818.23	817.88	817.41
12	817.80	817.63	817.96	817.82	817.24	817.24	818.94	818.45	818.49	818.24	817.82	817.40
13	817.75	817.61	817.94	817.78	817.23	817.49	818.87	818.45	818.54	818.22	817.78	817.40
14	817.69	817.59	817.90	817.75	817.22	817.90	818.89	818.44	818.57	818.20	817.74	817.39
15	817.69	817.58	817.87	817.73	817.20	818.13	818.89	818.43	818.56	818.17	817.73	817.55
16	817.63	817.76	817.86	817.70	817.20	818.27	818.82	818.43	818.54	818.15	817.71	817.56
17	817.63	818.01	817.84	817.67	817.21	818.49	818.76	818.41	818.60	818.15	817.68	817.53
18	817.51	818.15	817.83	817.64	817.22	818.70	818.75	818.40	818.60	818.16	817.67	817.51
19	817.52	818.23	817.81	817.61	817.23	818.81	818.73	818.41	818.59	818.16	817.65	817.48
20	817.48	818.34	817.79	817.58	817.23	818.85	818.68	818.42	818.58	818.19	817.66	817.47
21	817.48	818.45	817.77	817.56	817.24	818.92	818.65	818.41	818.55	818.19	817.65	817.45
22	817.48	818.51	817.74	817.53	817.25	819.00	818.60	818.41	818.54	818.18	817.63	817.46
23	817.49	818.52	817.79	817.50	817.25	819.04	818.54	818.40	818.52	818.15	817.58	817.45
24	817.43	818.51	817.90	817.49	817.24	819.06	818.48	818.41	818.49	818.10	817.56	817.43
25	817.43	818.48	817.95	817.47	817.24	819.06	818.42	818.40	818.46	818.09	817.55	817.43
26	817.43	818.43	817.98	817.44	817.23	819.12	818.44	818.39	818.45	818.09	817.54	817.42
27	817.47	818.35	817.97	817.41	817.22	819.15	818.47	818.39	818.42	818.08	817.51	817.47
28	817.59	818.33	817.94	817.38	817.21	819.13	818.43	818.39	818.38	818.09	817.50	817.47
29	817.69	818.29	817.94	817.36	---	819.10	818.45	818.42	818.39	818.10	817.49	817.43
30	817.75	818.26	817.92	817.34	---	819.07	818.44	818.42	818.41	818.05	817.47	817.41
31	817.74	---	817.88	817.36	---	819.06	---	818.42	---	818.06	817.47	---
MEAN	817.70	817.99	817.95	817.67	817.26	818.14	818.79	818.42	818.51	818.20	817.74	817.47
MAX	817.95	818.52	818.21	817.95	817.38	819.15	819.09	818.47	818.65	818.38	818.03	817.57
MIN	817.43	817.58	817.74	817.34	817.20	817.12	818.42	818.38	818.38	818.05	817.47	817.39

CAL YR 1981 MEAN 817.85 MAX 819.09 MIN 816.96
WTR YR 1982 MEAN 817.99 MAX 819.15 MIN 817.12

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY

LOCATION.--Lat 42°32'08", long 77°42'16", Livingston County, Hydrologic Unit 0413002, on right bank on Poags Hole Road, 0.7 mi (1.1 km) upstream from Stony Brook, and 1.7 mi (2.7 km) south of Dansville.

DRAINAGE AREA.--88.9 mi² (230 km²) revised.

PERIOD OF RECORD.--August 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 715.60 ft (218.115 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--8 years, 104 ft³/s (2.945 m³/s), 15.89 in/yr (404 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,870 ft³/s (81.3 m³/s) Sept. 20, 1977, gage height, 5.51 ft (1.679 m); minimum discharge, 7.4 ft³/s (0.21 m³/s) Sept. 11, 1975; minimum gage height, 0.70 ft (0.213 m) several days in August, September, and October 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft³/s)	(m³/s)	(ft)	(m)	Date	Time	(ft³/s)	(m³/s)	(ft)	(m)
Oct. 28	0430	1,450	41.1	3.81	1.161	June 6	0030	*2,210	62.6	*4.49	1.369
Mar. 13	1545	1,380	39.1	3.66	1.116						

Minimum discharge, 11 ft³/s (0.31 m³/s), Sept. 13, 14, gage height, 0.81 ft (0.247 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	94	65	50	170	37	470	54	40	54	21	14
2	90	81	73	52	160	35	272	50	75	40	21	15
3	76	72	70	58	150	33	257	47	50	35	21	16
4	57	64	64	170	240	32	282	45	42	34	23	16
5	49	58	62	163	190	46	182	43	442	30	23	14
6	70	87	56	100	150	36	142	42	1280	26	20	14
7	173	94	55	82	120	36	159	40	482	25	19	14
8	140	73	65	68	98	31	142	190	257	25	19	14
9	86	65	67	60	82	31	132	167	145	23	20	13
10	70	58	62	56	70	32	149	83	104	23	22	13
11	60	54	64	54	64	43	207	67	91	23	19	12
12	53	49	62	50	60	375	224	61	70	31	18	12
13	49	45	55	49	54	831	369	55	65	23	18	12
14	47	43	54	47	52	671	312	50	72	22	17	12
15	44	43	54	46	50	436	233	46	56	22	16	19
16	42	436	54	45	358	348	216	43	96	21	16	17
17	40	190	49	44	386	507	199	40	298	21	15	14
18	38	152	48	44	207	364	163	37	114	21	14	13
19	44	123	43	43	123	337	123	37	79	21	14	13
20	46	425	10	42	91	327	109	37	65	45	16	13
21	42	199	37	41	81	565	106	34	55	34	15	13
22	39	156	45	40	70	494	87	40	46	23	15	15
23	70	123	257	39	64	380	79	51	46	21	15	17
24	68	106	145	38	55	391	75	46	40	20	15	16
25	53	96	94	37	50	408	70	39	36	19	15	15
26	51	83	84	36	46	637	68	35	34	18	14	14
27	317	94	76	35	43	322	70	32	36	19	14	29
28	736	85	68	35	39	220	64	46	43	54	13	25
29	233	77	62	34	---	190	61	73	89	43	13	20
30	152	68	56	34	---	203	55	44	83	25	13	18
31	117	---	54	34	---	482	---	38	---	22	14	---
TOTAL	3209	3393	2140	1726	3323	8880	5077	1712	4431	863	528	462
MEAN	104	113	69.0	55.7	119	286	169	55.2	148	27.8	17.0	15.4
MAX	736	436	257	170	386	831	470	190	1280	54	23	29
MIN	38	43	37	34	39	31	55	32	34	18	13	12
CFSM	1.17	1.27	.78	.63	1.34	3.22	1.90	.62	1.67	.31	.19	.17
IN.	1.34	1.42	.90	.72	1.39	3.72	2.12	.72	1.85	.36	.22	.19

CAL YR 1981 TOTAL 30576 MEAN 83.8 MAX 1060 MIN 15 CFSM .94 IN 12.79
WTR YR 1982 TOTAL 35744 MEAN 97.9 MAX 1280 MIN 12 CFSM 1.10 IN 14.96

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY

LOCATION.--Lat 42°44'13", long 77°50'27", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft (30 m) upstream from bridge on State Highway 408 at Shakers Crossing, 1.4 mi (2.3 km) upstream from mouth, and 1.5 mi (2.4 km) northeast of Mount Morris (revised).

DRAINAGE AREA.--335 mi² (868 km²) revised.

PERIOD OF RECORD.--July 1915 to September 1922 (gage height only), November 1958 to September 1970, October 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 545.52 ft (166.274 m) National Geodetic Vertical Datum of 1929. Prior to July 1981 at site 250 ft (76 m) east on left bank of old filled-in channel at same datum and prior to November 1958 at site 250 ft (76 m) east and 40 ft (12 m) north at datum 5.52 ft (1.682 m) lower. April 1968 to September 1970, and since October 1974, auxiliary water-stage recorder 0.6 mi (1.0 km) downstream from base gage.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--19 years (water years 1960-70, 1975-82), 291 ft³/s (8.241 m³/s), 11.80 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,270 ft³/s (149 m³/s) Mar. 4, 1976, gage height, 13.33 ft (4.063 m); maximum gage height, 23.62 ft (7.199 m) present datum, May 17, 1916 (backwater from Genesee River); minimum discharge, 4.3 ft³/s (0.12 m³/s) Aug. 19, 1970, gage height, 2.26 ft (0.689 m), result of temporary regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972 reached an estimated discharge of 11,200 ft³/s (317 m³/s), from Corps of Engineers publication (Tropical Storm Agnes, June 1972).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 16	1430	3,270	92.6	10.33	3.149	June 6	0445	4,200	119	11.47	3.496
Mar. 13	2130	*a4,400	125	*b12.93	3.941						

a About.
b Backwater from Genesee River.

Minimum discharge, 32 ft³/s (0.91 m³/s) Sept. 14, gage height, 3.49 ft (1.064 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	322	237	180	120	180	1700	167	112	514	63	51
2	328	269	261	170	250	170	876	164	222	179	58	50
3	318	257	254	170	400	150	704	156	149	120	60	65
4	250	205	229	460	751	140	936	149	120	120	72	51
5	187	196	222	838	595	130	612	141	328	105	83	44
6	187	315	205	400	413	130	503	137	3370	98	65	42
7	435	345	191	330	350	120	480	128	1940	86	58	43
8	421	273	229	270	310	120	460	273	998	95	57	44
9	367	233	250	240	270	110	480	591	665	76	65	39
10	281	209	205	230	240	110	668	294	500	71	69	39
11	218	196	205	220	220	300	952	209	309	71	58	36
12	191	179	218	210	200	1500	820	183	256	86	52	36
13	171	164	200	200	190	2500	994	171	222	86	51	36
14	128	160	196	190	180	3230	1030	156	294	76	50	35
15	116	156	196	180	180	2170	608	141	191	72	48	76
16	116	1550	200	170	450	1620	500	128	196	67	47	62
17	109	1430	191	170	741	1960	463	124	670	65	47	47
18	102	877	160	160	566	1560	414	112	320	65	50	40
19	109	562	130	160	481	1300	340	109	185	63	44	40
20	120	1590	120	150	448	973	318	116	162	76	44	37
21	109	1200	120	150	512	1530	322	120	161	137	48	37
22	98	677	140	140	548	1680	277	105	160	76	46	43
23	164	490	900	140	447	1140	257	156	160	67	46	48
24	250	400	990	140	420	981	246	146	137	62	44	47
25	164	354	477	130	327	1100	218	124	116	58	43	43
26	156	336	355	130	280	1830	214	109	112	52	44	46
27	630	353	322	130	230	1210	225	98	116	51	37	74
28	1870	345	306	130	200	627	209	128	137	98	37	92
29	1180	306	288	120	---	552	187	257	331	187	37	60
30	633	254	250	120	---	599	175	146	494	83	37	51
31	433	---	209	120	---	1050	---	124	---	71	42	---
TOTAL	9965	14203	8456	6548	10319	30772	16188	5162	13133	3133	1602	1454
MEAN	321	473	273	211	369	993	540	167	438	101	51.7	48.5
MAX	1870	1590	990	838	751	3230	1700	591	3370	514	83	92
MIN	98	156	120	120	120	110	175	98	112	51	37	35
CFSM	.96	1.41	.82	.63	1.10	2.96	1.61	.50	1.31	.30	.15	.15
IN.	1.11	1.58	.94	.73	1.15	3.42	1.80	.57	1.46	.35	.18	.16

CAL YR 1981 TOTAL 94829 MEAN 260 MAX 2350 MIN 45 CFSM .78 IN 10.53
WTR YR 1982 TOTAL 120935 MEAN 331 MAX 3370 MIN 35 CFSM .99 IN 13.43

04228950 CANADICE LAKE NEAR HEMLOCK, NY

04229000 CANADICE OUTLET NEAR HEMLOCK, NY

LOCATION.--Lake: Lat 42°44'27", long 77°34'20", Ontario County, Hydrologic Unit 04130003, at dam at outlet of Canadice Lake, 3.6 mi (5.8 km) upstream from point of diversion to Hemlock Lake, and 4 mi (6 km) southeast of Hemlock. Outlet: Lat 42°44'27", long 77°34'20", Ontario County, upstream from weir, 60 ft (18.3 m) downstream from dam.

DRAINAGE AREA.--12.5 mi² (32.4 km²) revised.

PERIOD OF RECORD.--Lake: October 1970 to September 1982 (discontinued).
Outlet: April 1903 to September 1982 (discontinued). Prior to October 1966, published as "Canadice Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area; 1967.

GAGE.--Nonrecording gage read once daily and whenever control gate is changed. Datum of gage is 1,093.00 ft (333.146 m) National Geodetic Vertical Datum of 1929 (furnished by city of Rochester).

REMARKS.--Outflow from Canadice Lake diverted into Hemlock Lake for Rochester water supply. Flow regulated by gates at dam and augmented by pumping. Discharge computed by weir formula and from pumping records. Intermittent flow over spillway is not monitored. Accuracy of adjusted record, as indicative of natural runoff, is therefore reduced.

COOPERATION.--Records furnished by Department of Public Works, City of Rochester.

AVERAGE DISCHARGE.--79 years, 11.4 ft³/s (0.323 m³/s), unadjusted.

CORRECTIONS.--Figures of change in contents for Canadice Lake herein reported in millions of cubic feet were erroneously reported as millions of cubic feet per second in reports for 1971-81.

MONTHEND ELEVATION, CONTENTS, AND MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCT. 1981 TO SEPT. 1982

	04228950 CANADICE LAKE			04229000 CANADICE OUTLET			
	* Elevation FT	Contents FT³	Change in contents FT³	Observed discharge MEAN	† Adjusted for change in contents in Canadice Lake MEAN	CFSM	IN.
October	1,092.85	306.80	+ 14.8	21.8	+27.4	+2.19	+ 2.53
November	1,093.31	319.68	+ 12.9	24.1	+29.0	+2.32	+ 2.59
December	1,094.50	354.00	+ 34.3	0	+12.8	+1.02	+ 1.18
CAL YR 1981			+ 72.1	13.8	+16.1	+1.29	+17.52
January	1,095.37	380.47	+ 26.5	0	+ 9.88	+ .79	+ .91
February	1,096.03	400.96	+ 20.5	0	+ 8.47	+ .68	+ .71
March	1,098.74	490.16	+ 89.2	5.99	+39.3	+3.14	+ 3.63
April	1,097.83	459.39	- 30.8	45.6	+33.8	+2.70	+ 3.02
May	1,096.25	408.00	- 51.4	41.9	+22.7	+1.82	+ 2.09
June	1,095.98	399.38	- 8.62	17.0	+13.6	+1.09	+ 1.22
July	1,094.19	344.70	- 54.7	5.48	-14.9	-1.20	- 1.38
August	1,093.05	312.40	- 32.3	2.33	- 9.73	- .78	- .90
September	1,092.46	295.88	- 16.5	6.05	- .32	- .03	- .03
WTR YR 1982			+ 3.92	14.2	+14.3	+1.15	+15.57

* Elevation at 2400 hours on last day of month.

† Adjustments by Geological Survey. Negative figures indicate that natural losses from Canadice Lake exceeded inflow or that unmonitored spillage occurred.

NOTE.--All figures of contents expressed in millions.

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY

LOCATION.--Lat 42°57'26", long 77°35'21", Monroe County, Hydrologic Unit 04130003, on right bank 25 ft (8 m) downstream from bridge on State Highway 65 at Honeoye Falls, and 15.3 mi (24.6 km) upstream from mouth.

DRAINAGE AREA.--196 mi² (508 km²) revised.

PERIOD OF RECORD.--October 1945 to September 1970, October 1972 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft (185.928 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1970, water-stage recorder at same site at datum 609.76 ft (185.855 m) NGVD.

REMARKS.--Records good except those for winter periods, which are poor. Outlet of Honeoye Lake not controlled (see station 04228845). Some diversion from and regulation by Hemlock and Canadice Lakes for water supply of city of Rochester. Diurnal fluctuation at low flow caused by mills upstream from station. Prior to 1967 water year, published monthly figures adjusted for change in contents in, and diversion from, Hemlock and Canadice Lakes. During low-water periods the village of Honeoye Falls pumps water from two deep wells with maximum pumping capacity of 600 gal/min (1.33 ft³/s or 0.038 m³/s). This pumped water enters creek upstream from gage.

AVERAGE DISCHARGE.--35 years (water years 1946-70, 1973-82), 121 ft³/s (3.427 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,630 ft³/s (131 m³/s) Mar. 28, 1950, gage height, 6.42 ft (1.957 m), datum then in use, from rating curve extended above 2,700 ft³/s (76.5 m³/s) by logarithmic plotting; minimum, 0.06 ft³/s (0.002 m³/s) Aug. 28, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of about 6.3 ft (1.92 m) current datum, discharge, about 6,600 ft³/s (187 m³/s), from rating curve extended above 2,700 ft³/s (76.5 m³/s) by logarithmic plotting.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,130 ft³/s (32.0 m³/s) Mar. 14, gage height, 3.30 ft (1.006 m); maximum gage height, 3.96 ft (1.207 m) Mar. 14 (ice jam); minimum discharge, 2.8 ft³/s (0.079 m³/s) Aug. 24, gage height, 0.23 ft (0.070 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	111	115	110	30	62	347	54	36	48	9.1	4.2
2	39	102	124	120	30	58	335	50	44	37	7.5	6.7
3	54	104	122	120	34	56	284	48	58	31	6.2	6.0
4	76	98	102	160	39	54	299	44	43	28	6.6	6.4
5	65	97	93	378	44	52	262	41	41	26	7.5	5.7
6	57	102	85	262	52	49	235	39	295	23	6.8	5.4
7	77	141	76	190	49	45	190	37	382	22	6.2	5.4
8	109	151	84	111	47	43	180	58	229	20	5.8	5.4
9	109	129	107	96	45	42	200	232	141	18	5.4	5.1
10	79	113	91	86	44	40	273	216	104	16	5.2	5.1
11	65	100	88	78	43	50	323	138	89	14	6.4	5.1
12	69	93	84	74	42	150	273	115	87	13	7.1	5.1
13	68	82	82	70	41	600	235	104	119	14	6.0	4.8
14	65	76	80	66	40	980	232	93	87	13	5.4	4.5
15	63	74	80	62	40	690	203	82	68	11	4.9	5.4
16	61	242	82	60	50	510	173	71	58	9.6	4.4	20
17	59	587	86	56	100	581	162	63	77	8.7	4.4	37
18	55	419	74	54	210	651	156	58	91	8.3	3.8	21
19	54	331	68	52	170	511	141	54	71	10	3.0	15
20	54	424	64	50	140	419	126	53	58	13	5.1	10
21	48	537	62	49	120	437	122	53	53	16	4.1	7.9
22	46	369	60	47	110	461	113	48	50	19	3.5	7.5
23	46	273	150	44	100	405	98	47	48	15	3.0	7.9
24	71	229	520	41	90	347	89	49	43	11	2.8	7.9
25	71	206	335	38	82	331	82	49	39	9.1	3.3	7.5
26	62	178	187	36	76	373	76	44	36	7.5	6.0	6.7
27	87	164	150	31	72	410	76	40	35	7.5	5.7	8.3
28	273	159	130	32	66	323	71	37	33	15	5.4	12
29	303	141	120	31	---	291	65	48	34	35	5.1	10
30	181	126	110	31	---	284	58	50	43	24	4.8	9.0
31	126	---	100	30	---	280	---	39	---	14	4.5	---
TOTAL	2626	5958	3711	2665	2006	9585	5479	2154	2592	556.7	165.0	268.0
MEAN	84.7	199	120	86.0	71.6	309	183	69.5	86.4	18.0	5.32	8.93
MAX	303	587	520	378	210	980	347	232	382	48	9.1	37
MIN	34	74	60	30	30	40	58	37	33	7.5	2.8	4.2

CAL YR 1981	TOTAL	34136.6	MEAN	93.5	MAX 809	MIN 7.3
WTR YR 1982	TOTAL	37765.7	MEAN	103	MAX 980	MIN 2.8

04230380 OATKA CREEK AT WARSAW, NY

LOCATION.--Lat 42°44'39", long 78°08'16", Wyoming County, Hydrologic Unit 04130003, on right bank 400 ft (122 m) downstream from bridge on Court Street, Warsaw.

DRAINAGE AREA.--39.1 mi^2 (101 km^2) revised.

PERIOD OF RECORD.--December 1963 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 987.15 ft (300.883 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--18 years (water years 1965-82), 53.5 ft^3/s (1.515 m^3/s), 18.58 in/yr (472 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,010 ft^3/s (114 m^3/s) June 23, 1972, gage height, 9.75 ft (2.972 m), from rating curve extended above 1,770 ft^3/s (50.1 m^3/s) on basis of slope-area measurement of peak discharge; minimum, 0.90 ft^3/s (0.025 m^3/s) Aug. 1, 1965; minimum gage height, 0.96 ft (0.293 m) Aug. 30-31, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 690 ft^3/s (19.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 16	1100	816	23.1	3.97	1.210	Mar. 31	1915	748	21.2	3.82	1.164
Mar. 13	1215	ice jam		*4.26	1.298	June 6	0045	*925	26.2	4.24	1.292
Mar. 13	1745	891	25.2	4.16	1.268						

Minimum discharge, 1.1 ft^3/s (0.03 m^3/s) Aug. 30-31, gage height, 0.96 ft (0.293 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	27	35	32	22	23	270	26	14	23	7.3	8.2
2	51	25	46	35	30	22	129	25	16	16	7.3	22
3	55	23	45	38	50	21	170	23	14	13	9.0	25
4	36	22	37	179	35	21	132	22	13	13	11	12
5	25	21	35	120	27	20	96	21	69	12	9.9	8.2
6	28	56	32	69	24	20	90	20	382	10	8.2	6.6
7	106	65	29	55	23	20	80	20	82	9.9	6.6	5.9
8	100	50	36	38	22	19	74	50	46	11	6.6	4.5
9	51	39	33	36	21	19	68	48	29	9.0	8.2	3.7
10	36	30	32	35	20	19	102	28	19	8.2	6.6	3.7
11	29	26	30	34	20	30	113	22	21	7.3	5.9	3.0
12	25	24	30	33	19	100	132	20	43	13	3.7	3.0
13	22	22	29	32	19	470	224	19	102	9.0	3.7	3.0
14	20	21	29	31	18	467	139	18	120	8.2	3.0	3.0
15	19	21	31	30	18	285	102	17	46	7.3	2.3	6.6
16	18	344	33	29	25	211	102	16	58	6.6	2.3	5.9
17	18	139	27	29	60	402	104	16	88	8.2	2.3	4.5
18	17	90	25	28	50	218	90	15	47	13	3.0	4.5
19	27	63	24	27	45	182	64	16	32	13	1.8	4.5
20	26	179	23	27	42	204	58	16	25	15	3.0	3.7
21	19	88	22	26	37	367	57	14	23	13	3.7	5.9
22	18	64	30	26	35	274	47	15	21	9.0	3.0	11
23	29	58	259	25	32	214	42	18	19	7.3	3.0	9.9
24	40	53	115	25	28	218	38	17	17	5.9	2.3	7.3
25	28	47	60	24	26	207	36	16	16	4.5	4.5	5.9
26	40	40	55	24	25	249	36	14	16	3.7	4.5	5.9
27	74	82	47	24	24	117	40	14	17	4.5	2.3	23
28	66	58	38	23	23	104	35	24	15	21	1.8	13
29	51	46	33	23	---	108	30	25	21	17	1.8	11
30	38	37	29	23	---	158	28	17	28	9.9	1.4	9.9
31	31	---	28	22	---	471	---	15	---	8.2	9.9	---
TOTAL	1165	1860	1357	1202	820	5260	2728	647	1459	329.7	149.9	244.3
MEAN	37.6	62.0	43.8	38.8	29.3	170	90.9	20.9	48.6	10.6	4.84	8.14
MAX	106	344	259	179	60	471	270	50	382	23	11	25
MIN	17	21	22	22	18	19	28	14	13	3.7	1.4	3.0
CFSM	.96	1.59	1.12	.99	.75	4.35	2.33	.54	1.24	.27	.12	.21
IN.	1.11	1.77	1.29	1.14	.78	5.00	2.60	.62	1.39	.31	.14	.23

CAL YR 1981 TOTAL 15895.3 MEAN 43.5 MAX 765 MIN 5.9 CFSM 1.11 IN 15.12
WTR YR 1982 TOTAL 17221.9 MEAN 47.2 MAX 471 MIN 1.4 CFSM 1.21 IN 16.38

04230500 OATKA CREEK AT GARBUTT, NY

LOCATION.--Lat 43°00'36", long 77°47'30", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft (12 m) downstream from bridge on Union Street in Garbutt, 1.5 mi (2.4 km) west of Scottsville, and 4.2 mi (6.8 km) upstream from mouth.

DRAINAGE AREA.--200 mi^2 (518 km^2) revised.

PERIOD OF RECORD.--October 1945 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 560.86 ft (170.950 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--37 years, 212 ft^3/s (6.004 m^3/s), 14.39 in/yr (366 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft^3/s (200 m^3/s) Mar. 31, 1960, gage height, 8.64 ft (2.633 m); minimum, 3.3 ft^3/s (0.093 m^3/s) Sept. 11, 12, 1958; minimum gage height, 1.88 ft (0.573 m) June 19, 1959, result of regulation; minimum daily discharge, 13 ft^3/s (0.37 m^3/s) Oct. 30 to Nov. 1, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,320 ft^3/s (65.7 m^3/s) Mar. 15 at 2145 hours, gage height, 5.96 ft (1.814 m), no other peak above base of 1,500 ft^3/s (42.5 m^3/s); minimum, 33 ft^3/s (0.935 m^3/s) Sept. 1, gage height, 2.32 ft (0.707 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	173	213	220	120	120	845	144	85	99	49	34
2	132	161	210	230	120	120	1010	137	83	92	43	36
3	179	149	228	220	130	110	729	132	79	82	43	40
4	210	140	217	320	140	110	574	127	78	74	49	68
5	179	132	199	735	150	110	528	124	82	64	56	54
6	155	135	189	639	140	100	460	120	351	61	49	41
7	164	161	176	580	130	100	350	116	582	59	44	36
8	246	220	176	340	120	98	330	126	709	57	43	36
9	282	186	190	240	120	96	320	174	382	56	43	36
10	231	161	180	210	110	94	460	190	199	54	40	36
11	176	143	160	190	110	120	538	146	158	54	40	34
12	149	132	160	180	100	270	543	131	146	59	40	34
13	135	127	150	170	96	620	528	123	155	61	38	34
14	124	122	150	170	94	1400	574	122	262	57	38	34
15	119	119	150	160	110	2000	567	112	294	54	37	36
16	114	307	160	160	130	1780	450	109	220	48	37	36
17	110	722	170	160	176	1530	390	106	199	48	37	36
18	110	792	140	150	224	1440	370	104	254	46	37	36
19	107	651	130	150	224	1280	331	104	192	49	37	36
20	107	484	120	150	206	963	282	106	146	59	37	34
21	114	488	120	140	203	920	262	106	130	57	36	34
22	105	498	120	140	199	1060	242	103	119	54	36	36
23	110	410	230	140	192	1110	218	102	114	54	36	36
24	114	321	540	140	180	941	200	98	107	46	36	36
25	143	282	580	130	160	805	185	98	98	43	41	34
26	135	254	520	130	150	845	176	93	93	43	37	34
27	170	246	320	130	140	858	174	86	89	43	36	41
28	299	290	270	120	130	710	177	86	86	46	36	37
29	321	278	240	120	---	564	163	87	93	64	36	46
30	250	235	220	120	---	580	151	92	93	78	36	41
31	199	---	190	120	---	657	---	94	---	57	36	---
TOTAL	5116	8519	6818	6804	4104	21511	12127	3598	5678	1818	1239	1142
MEAN	165	284	220	219	147	694	404	116	189	58.6	40.0	38.1
MAX	321	792	580	735	224	2000	1010	190	709	99	56	68
MIN	105	119	120	120	94	94	151	86	78	43	36	34
CFSM	.83	1.42	1.10	1.10	.74	3.47	2.02	.58	.95	.29	.20	.19
IN.	.95	1.58	1.27	1.27	.76	4.00	2.26	.67	1.06	.34	.23	.21

CAL YR 1981 TOTAL 67413 MEAN 185 MAX 2430 MIN 38 CFSM .93 IN 12.54
WTR YR 1982 TOTAL 78474 MEAN 215 MAX 2000 MIN 34 CFSM 1.08 IN 14.60

04230650 GENESEE RIVER AT BALLANTYNE BRIDGE, NEAR MORTIMER, NY

LOCATION.--Lat 43°05'32", long 77°40'50", Monroe County, Hydrologic Unit 04130003, on right bank 400 ft (120 m) upstream from Ballantyne Bridge on State Highway 252, 1.6 mi (2.6 km) west of Mortimer, and 2.8 mi (4.5 km) upstream from Erie (Barge) Canal.

DRAINAGE AREA.--2,210 mi² (5,724 km²) revised.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) National Geodetic Vertical Datum of 1929.

REMARKS.--River regulated at high stages by Mount Morris Lake (see station 04224000). River regulated for operation of Erie (Barge) Canal and downstream powerplants.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 19.33 ft (5.892 m) Mar. 5, 1976; minimum, 8.20 ft (2.499 m) Nov. 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 15.66 ft (4.773 m) Mar. 27; minimum, 10.05 ft (3.063 m) Jan. 8.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.93	13.60	12.22	12.08	11.82	11.98	14.05	11.66	12.00	12.98	11.90	11.95
2	11.85	13.56	12.04	12.20	11.97	11.77	14.21	11.95	12.02	12.48	12.05	12.08
3	12.16	13.35	11.77	12.06	11.78	11.68	13.74	12.08	12.01	12.09	12.07	11.98
4	12.26	12.92	11.74	11.97	12.05	11.73	13.41	11.84	12.09	12.03	11.91	11.90
5	12.18	12.68	11.69	12.81	12.13	11.41	13.77	11.97	11.94	12.10	11.89	12.10
6	11.93	12.46	11.94	12.68	12.12	11.67	13.74	11.98	12.49	11.97	11.97	11.96
7	11.86	12.51	12.12	12.51	12.11	11.86	13.38	12.02	13.85	12.04	12.11	11.93
8	12.20	12.55	12.03	11.74	12.09	11.76	13.26	11.97	14.03	12.05	12.14	11.88
9	12.41	12.41	12.02	12.44	12.04	11.67	13.22	12.08	14.08	12.01	12.14	11.75
10	12.48	12.43	12.00	12.44	12.10	11.73	13.24	12.50	13.66	12.00	12.05	11.76
11	12.21	12.16	12.00	12.04	12.02	11.80	13.14	12.17	13.36	12.22	12.01	11.76
12	11.97	12.30	11.93	12.23	11.92	12.42	13.01	12.09	12.96	12.05	11.99	11.71
13	11.97	12.06	12.09	12.31	12.12	13.25	12.93	11.97	12.75	11.97	11.99	11.77
14	12.12	12.31	12.09	12.09	11.91	14.89	13.06	11.97	12.56	12.08	11.93	11.91
15	11.98	12.18	12.16	12.38	11.65	15.17	13.16	11.83	12.24	11.89	11.82	12.07
16	11.91	12.32	12.15	12.34	10.35	14.63	13.07	12.06	12.15	11.92	11.69	12.08
17	11.88	13.64	12.07	12.26	10.64	14.36	12.70	12.00	12.09	12.08	11.72	11.79
18	11.93	13.40	12.12	12.26	10.98	14.71	12.55	11.96	12.73	12.17	11.80	11.84
19	11.99	13.21	11.77	12.26	11.32	14.58	12.61	11.90	12.71	12.06	11.86	11.90
20	11.94	13.28	11.86	12.06	11.31	14.39	12.35	12.04	12.43	12.04	11.96	11.89
21	12.05	13.75	11.85	12.18	11.85	14.69	11.96	12.01	12.45	12.08	11.93	11.93
22	11.90	13.38	11.94	12.21	11.59	15.31	11.96	11.95	12.23	12.08	11.91	12.09
23	11.93	13.24	12.13	12.02	11.52	15.33	11.72	11.90	12.02	11.89	11.89	11.77
24	12.00	12.65	12.95	12.10	11.87	15.17	12.28	12.05	12.12	11.91	11.89	11.81
25	12.14	12.91	12.62	11.95	11.73	15.21	12.14	12.18	12.15	11.92	11.83	11.98
26	12.05	12.75	12.12	11.97	11.61	15.47	11.46	11.98	11.97	11.90	11.87	12.08
27	12.18	12.26	12.15	12.07	11.49	15.48	11.70	12.04	12.11	11.88	12.00	12.09
28	12.18	12.40	12.31	12.03	11.71	14.95	11.84	11.95	12.14	12.02	12.02	12.10
29	13.23	12.55	11.98	12.00	---	14.72	11.77	11.96	12.01	12.24	11.95	12.06
30	12.98	12.35	12.08	12.08	---	14.60	11.92	12.32	12.34	12.17	11.93	12.05
31	13.00	---	12.03	11.72	---	14.22	---	12.07	---	12.07	11.93	---
MEAN	12.15	12.79	12.06	12.18	11.71	13.63	12.78	12.01	12.52	12.08	11.94	11.93
MAX	13.23	13.75	12.95	12.81	12.13	15.48	14.21	12.50	14.08	12.98	12.14	12.10
MIN	11.85	12.06	11.69	11.72	10.35	11.41	11.46	11.66	11.94	11.88	11.69	11.71

CAL YR 1981 MEAN 12.23 MAX 15.98 MIN 11.38
WTR YR 1982 MEAN 12.32 MAX 15.48 MIN 10.35

04231000 BLACK CREEK AT CHURCHVILLE, NY

LOCATION.--Lat 43°06'02", long 77°52'57", Monroe County, Hydrologic Unit 04130003, on right bank at east end of Carrol Street in Churchville, 100 ft (30 m) downstream from main-line tracks of Penn Central Transportation Co., and 0.3 mi (0.5 km) downstream from Black Creek Dam.

DRAINAGE AREA.--130 mi^2 (337 km^2) revised.

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 551.88 ft (168.213 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Prior to May 1952, small diversion by Penn Central Transportation Co. and slight regulation by pumping operations upstream from station.

AVERAGE DISCHARGE.--37 years, 114 ft^3/s (3.228 m^3/s), 11.91 in/yr (303 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft^3/s (138 m^3/s) Mar. 31, 1960, gage height, 9.44 ft (2.877 m); minimum, 0.22 ft^3/s (0.006 m^3/s) Aug. 19, 1970; minimum gage height, 0.93 ft (0.283 m) Aug. 5-7, Sept. 15, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s (22.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 18	0430	872	24.7	4.70	1.432	Mar. 15	0330	*1,880	53.2	*6.52	1.987
Jan. 6	1600	824	23.3	4.59	1.399						

Minimum discharge, 4.7 ft^3/s (0.133 m^3/s) Aug. 19, gage height, 1.26 ft (0.384 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	134	113	140	49	98	294	64	80	37	23	12
2	72	109	121	140	48	90	324	64	67	29	21	14
3	88	100	127	160	50	84	271	62	51	24	18	20
4	120	93	120	300	56	78	253	60	41	22	22	27
5	100	87	109	500	70	72	228	60	50	20	29	22
6	90	95	101	792	60	68	192	60	195	18	25	16
7	100	116	92	544	54	66	140	60	310	18	18	13
8	130	129	101	280	50	62	130	71	415	16	14	12
9	150	119	114	160	49	60	120	98	244	15	14	11
10	100	98	96	140	47	56	180	99	124	19	12	9.8
11	76	86	86	120	46	58	220	85	85	16	10	8.3
12	66	78	82	110	45	120	210	75	72	21	9.3	7.4
13	60	74	78	100	44	620	188	71	67	18	8.8	6.5
14	55	70	76	96	44	1330	174	67	73	14	8.3	7.0
15	53	68	74	90	50	1770	168	59	73	13	7.4	7.8
16	50	250	80	86	80	1350	147	54	62	11	7.0	14
17	46	600	72	82	110	990	131	47	54	14	7.4	12
18	46	820	64	78	130	883	121	44	46	14	6.5	11
19	46	501	62	76	150	784	116	41	44	12	5.4	9.3
20	48	337	60	72	177	590	109	53	40	67	11	9.8
21	46	299	58	68	192	527	111	71	39	58	11	16
22	44	314	56	66	193	500	111	72	42	30	8.8	14
23	60	275	110	64	191	471	98	101	41	21	9.3	15
24	77	210	240	62	185	384	87	95	35	16	8.3	14
25	74	168	448	60	160	321	81	77	31	13	40	13
26	87	144	451	58	140	338	78	65	33	10	81	11
27	146	140	249	56	120	344	75	54	39	8.8	45	24
28	256	142	160	54	110	280	73	55	33	22	27	45
29	303	139	140	54	---	229	70	64	37	37	23	38
30	292	124	120	52	---	215	67	62	44	30	17	33
31	195	---	110	50	---	245	---	67	---	22	13	---
TOTAL	3140	5919	3970	4710	2700	13083	4567	2077	2567	685.8	560.5	472.9
MEAN	101	197	128	152	96.4	422	152	67.0	85.6	22.1	18.1	15.8
MAX	303	820	451	792	193	1770	324	101	415	67	81	45
MIN	44	68	56	50	44	56	67	41	31	8.8	5.4	6.5
CFSM	.78	1.52	.99	1.17	.74	3.25	1.17	.52	.66	.17	.14	.12
IN.	.90	1.69	1.14	1.35	.77	3.74	1.31	.59	.73	.20	.16	.14

CAL YR 1981 TOTAL 40595.3 MEAN 111 MAX 2000 MIN 3.5 CFSM .85 IN 11.62
WTR YR 1982 TOTAL 44452.2 MEAN 122 MAX 1770 MIN 5.4 CFSM .94 IN 12.72

04232000 GENESEE RIVER AT ROCHESTER, NY

LOCATION.--Lat 43°10'50", long 77°37'40", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft (12 m) downstream from Rochester Gas and Electric Corp. plant 5, 100 ft (30 m) upstream from bridge on Driving Park Avenue in Rochester, and 6.4 mi (10.3 km) upstream from mouth.

DRAINAGE AREA.--2,467 mi^2 (6,390 km^2) revised.

PERIOD OF RECORD.--April 1904 to September 1918, December 1919 to current year. Published as "at Driving Park Avenue," 1919-68.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.24 ft (75.054 m) National Geodetic Vertical Datum of 1929 (247.00 ft or 75.286 m, Barge Canal datum). April 1904 to December 1910, nonrecording gage and December 1910 to September 1918, water-stage recorder at site 5 mi (8 km) upstream at datum 506.85 ft (154.488 m), Barge Canal datum. December 1919 to Apr. 4, 1927, water-stage recorder in plant 5, and Apr. 4, 1927 to June 19, 1956, at present site at datum 3.00 ft (0.194 m) higher.

REMARKS.--Records good. Extensive diurnal fluctuation caused by powerplants upstream from station. New York State Erie (Barge) Canal crosses river 5.4 mi (8.7 km) upstream from station. Water diverted by the canal from Lake Erie is discharged into river from the west, the canal again diverting a smaller amount of water from river to the east. Additional regulation is provided by Rushford Lake and Mount Morris Lake.

AVERAGE DISCHARGE.--75 years, (water years 1905-18, 1921-82), 2,795 ft^3/s (79.15 m^3/s), 15.39 in/yr (391 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,300 ft^3/s (1,370 m^3/s) Mar. 30, 1916, gage height, 15.3 ft (4.66 m) site and datum then in use; maximum at present site, 34,400 ft^3/s (974 m^3/s) Mar. 19, 1942; maximum gage height, 17.08 ft (5.206 m) Apr. 2, 1940, present datum; minimum discharge, less than 10 ft^3/s (0.28 m^3/s), occurred during low-water periods when powerplant was shut down; minimum daily, 91 ft^3/s (2.58 m^3/s) Jan. 9, 29, Feb. 1, 8, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Discharge on Mar. 18, 1865, was about 54,000 ft^3/s (1,530 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,200 ft^3/s (657 m^3/s) Mar. 15, gage height, 14.19 ft (4.325 m), result of regulation; minimum, 490 ft^3/s (13.9 m^3/s) July 26, gage height, 1.84 ft (0.561 m), result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2080	8540	3790	3680	2330	2760	10300	1950	2340	6860	1140	1390
2	2490	8490	3800	3790	2350	2750	10500	1590	2180	4940	1020	1780
3	3790	7960	3640	3560	2420	2430	9770	1820	2620	3620	1230	2110
4	4330	6840	3330	4660	2590	2370	9070	2170	2430	3370	1380	1510
5	4400	5560	3180	6080	2960	2280	8260	1660	2270	3400	1070	1400
6	3690	4940	2800	5410	3010	2040	7810	1800	4960	3740	863	1100
7	3630	4830	3140	5230	2830	2090	7320	1630	9330	3650	882	1000
8	4340	4880	3240	4430	2840	2310	6690	1950	8980	3270	945	1360
9	4870	4710	3500	3320	2830	2010	6090	2500	9020	3680	1000	1330
10	4890	4640	3360	3000	2600	2120	5850	4180	7750	3500	979	1600
11	4340	4350	3030	2570	2630	2130	5780	3980	6580	4030	919	2260
12	3200	3650	2810	2640	2670	4470	5590	2670	5740	4550	913	2310
13	2730	3270	3280	3230	2460	7260	5270	2510	5100	4360	882	1560
14	2470	2780	3000	3230	2540	12700	5430	2220	4720	3110	888	1990
15	2750	3500	3120	3080	2770	13300	5690	1600	5280	2080	865	2410
16	2480	4250	3090	3280	2900	11900	5270	2140	4470	1010	872	2520
17	2280	8840	2860	3100	2700	11400	4860	1720	2810	990	876	2570
18	1770	8290	2540	2940	3170	11900	4530	1460	5080	1040	890	2130
19	2190	7340	2070	2920	3530	11600	4390	1560	5240	1240	913	1780
20	1910	7410	1950	3070	3570	11200	4200	1410	4400	1350	1090	2900
21	2080	9270	2300	2840	3520	11700	3680	1510	4050	1400	1030	3080
22	1930	8070	2410	2860	3660	12900	2890	1560	3870	1560	1040	3510
23	2250	7310	3600	2560	3630	13000	1930	1580	3860	1470	1050	3820
24	2220	6640	6340	2880	3330	12700	2750	2050	3500	913	1090	3210
25	2800	5070	5850	2810	3250	12600	3060	2460	3120	896	1670	3170
26	3340	4920	4930	2620	3110	13200	2340	2500	2990	917	1430	3560
27	3750	4560	4290	2440	3000	13200	1700	1740	3710	755	1460	4280
28	5560	4070	4080	2400	2770	12000	2050	2000	3700	884	1440	3540
29	7880	4140	4200	2430	---	11400	1450	1910	4160	1170	1620	3190
30	7790	4160	3500	2430	---	11200	2000	2680	4670	2390	1370	2930
31	6970	---	3560	2440	---	10600	---	2920	---	1370	1030	---
TOTAL	111200	173280	106590	101930	81970	255520	156520	65430	138930	77515	33847	71300
MEAN	3587	5776	3438	3288	2928	8243	5217	2111	4631	2500	1092	2377
MAX	7880	9270	6340	6080	3660	13300	10500	4180	9330	6860	1670	4280
MIN	1770	2780	1950	2400	2330	2010	1450	1410	2180	755	863	1000

CAL YR 1981 TOTAL 1205030 MEAN 3301 MAX 15300 MIN 1010
WTR YR 1982 TOTAL 1374032 MEAN 3764 MAX 13300 MIN 755

04232006 GENESEE RIVER AT CHARLOTTE DOCKS AT ROCHESTER, NY
(National stream-quality accounting network station)

WATER QUALITY RECORDS

LOCATION.--Lat 43°13'26", long 77°36'59", Monroe County, Hydrologic Unit 04130003, at Charlotte Docks, at the Rochester Cement Corp., in Rochester, 0.4 mi (0.6 km) upstream from Rattlesnake Point, 1.6 mi (2.6 km) upstream from Stutson Street Bridge, and 3.9 mi (6.3 km) downstream from gaging station (04232000) at Rochester.

DRAINAGE AREA.--2,457 mi^2 (6,364 km^2) at station 04232000.

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971-72 (a), 1974 (b), 1975-82 (c).
MINOR ELEMENTS DATA: 1971-73 (a), 1974-82 (b).
ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-80 (c), 1981 (b).
NUTRIENT DATA: 1971 (a), 1974 (b), 1975-82 (c).
BIOLOGICAL DATA:
Bacteria--1974 (b), 1975-82 (c).
Phytoplankton--1974 (b), 1975-77 (c), 1978-81 (b).
Periphyton--1975-80 (b).
SEDIMENT DATA: 1974 (b), 1975-82 (c).

REMARKS.--Water-discharge data are based on records for station 04232000 Genesee River at Rochester.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (FTU)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
OCT												
06...	1100	3690	450	7.3	12.5	57	755	9.1	93	K140000	1500	190
JUN												
08...	1030	8980	400	7.5	15.5	240	765	9.9	99	6400	8400	150
29...	1030	4160	760	6.6	20.0	20	750	7.4	83	160	870	230
JUL												
21...	1000	1400	685	7.1	27.0	4.5	765	4.8	60	K24000	760	200
AUG												
18...	1030	890	855	7.2	24.5	9.0	760	7.8	94	230	K40	230
SEP												
02...	1030	1780	875	7.2	22.5	15	755	7.3	85	400	140	270

DATE	HARD- NESS NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
OCT												
06...	76	53	13	30	2.7	110	44	62	.1	6.0	272	277
JUN												
08...	48	43	9.3	19	2.6	98	44	28	.1	5.2	250	210
29...	98	68	15	60	2.5	134	80	88	.2	3.9	462	398
JUL												
21...	91	61	12	51	2.8	111	95	79	.2	1.8	421	370
AUG												
18...	110	67	14	69	3.6	115	110	120	.2	.9	475	454
SEP												
02...	140	79	17	68	4.0	124	130	110	.3	.6	523	484

K Results based on colony count outside the acceptable range (non-ideal colony count).

04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
OCT												
06...	.65	.170	1.10	.140	.030	.020	--	--	--	--	--	--
JUN												
08...	2.0	.070	.50	.290	.030	.020	5	2	100	46	2	<1
29...	.93	.150	.20	.070	.030	.010	2	1	<100	66	<1	<1
JUL												
21...	.29	.320	.80	.140	.080	.030	--	--	--	--	--	--
AUG												
18...	.19	.610	1.60	.140	.040	.020	2	2	<100	60	3	<1
SEP												
02...	.48	.600	.50	.020	.040	<.010	2	2	100	100	1	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT											
06...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	20	10	18	<1	110	7	31000	230	27	1	620
29...	10	<10	<1	<1	12	3	1300	18	3	<1	80
JUL											
21...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	10	10	3	2	12	8	620	17	7	7	120
SEP											
02...	10	10	<1	<1	16	6	780	30	12	6	140

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT											
06...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	15	<.1	<.1	50	4	<1	<1	<1	<1	100	22
29...	39	.1	.1	4	3	<1	<1	2	<1	60	14
JUL											
21...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	56	.1	.1	9	9	<1	<1	3	<1	130	43
SEP											
02...	80	.2	<.1	8	6	<1	<1	4	4	70	40

04232006 GENESEE RIVER AT CHARLOTTE DOCKS, ROCHESTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	TEMPER- ATURE (DEG C)
JUN					
08...	1035	40	3.0	399	15.0
08...	1040	40	7.0	399	15.0
08...	1045	40	12.0	399	15.0
08...	1050	40	18.0	398	15.0
08...	1055	150	3.0	401	15.5
08...	1100	150	7.0	401	15.5
08...	1105	150	10.0	401	15.5
08...	1110	150	12.0	401	15.5
08...	1115	260	3.0	403	15.5
08...	1120	260	7.0	402	15.5
08...	1125	260	10.0	402	15.5
29...	1035	40	3.0	748	20.5
29...	1040	40	7.0	757	20.5
29...	1045	40	12.0	755	20.5
29...	1050	40	15.0	755	20.5
29...	1055	150	3.0	740	20.5
29...	1100	150	7.0	766	20.5
29...	1105	150	10.0	764	20.5
29...	1110	150	14.0	762	20.5
29...	1115	260	3.0	769	20.5
29...	1120	260	7.0	768	20.5
29...	1125	260	10.0	764	20.5
JUL					
21...	1005	40	3.0	680	26.5
21...	1010	40	7.0	680	26.5
21...	1015	40	12.0	667	26.5
21...	1020	40	18.0	584	24.5
21...	1025	150	3.0	694	27.0
JUL					
21...	1030	150	7.0	693	26.5
21...	1035	150	10.0	690	26.5
21...	1040	150	14.0	660	26.5
21...	1045	260	3.0	697	27.0
21...	1050	260	7.0	697	27.0
21...	1055	260	10.0	695	27.0
AUG					
18...	1035	40	3.0	848	24.5
18...	1040	40	7.0	850	24.5
18...	1045	40	12.0	836	24.5
18...	1050	40	18.0	780	23.0
18...	1055	150	3.0	859	24.5
18...	1100	150	7.0	858	24.5
18...	1105	150	10.0	855	24.5
18...	1110	150	14.0	816	24.0
18...	1115	260	3.0	854	25.0
18...	1120	260	7.0	858	25.0
18...	1125	260	10.0	856	25.0
SEP					
02...	1035	40	3.0	874	22.5
02...	1040	40	7.0	875	22.5
02...	1045	40	12.0	875	22.5
02...	1050	40	18.0	876	22.5
02...	1055	150	3.0	874	23.0
02...	1100	150	6.0	875	23.0
02...	1105	150	9.0	875	22.5
02...	1110	260	3.0	876	23.0
02...	1115	260	6.0	876	23.0
02...	1120	260	9.0	876	22.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
06...	1100	3690	101	1010	100
JUN					
08...	1030	8980	776	18800	98
29...	1030	4160	53	595	97
JUL					
21...	1000	1400	10	38	--
AUG					
18...	1030	890	16	38	--
SEP					
02...	1030	1780	20	96	--

04232040 IRONDEQUOIT CREEK NEAR PITTSFORD, NY

LOCATION.--Lat 43°03'15", long 77°29'28", Monroe County, Hydrologic Unit 04140101, on right bank 140 ft (43 m) upstream from bridge on Thornell Road, 0.9 mi (1.4 km) south of creek passage under Erie (Barge) Canal, and 2.7 mi (4.3 km) southeast of Pittsford.

DRAINAGE AREA.--44.4 mi^2 (115.0 km^2).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1961-62, 1964-66, 1968, and annual maximum, water years 1962-63, 1965-66, 1968-70, 1972. March 1980 to current year.

REVISED RECORDS.--WDR NY-81-3: Drainage area.

GAGE.--Water-stage recorder. Prior to March 1980, nonrecording gage and crest-stage gage at site 150 ft (46 m) downstream at same datum. Altitude of gage is 405 ft (123 m), from Corps of Engineers river-profile map.

REMARKS.--Records good except those above 350 ft^3/s (9.91 m^3/s) and those for period Aug. 5-19, which are fair. Unpublished water-quality records are available in files of Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,140 ft^3/s (32.3 m^3/s) Mar. 12, 1962, gage height, 8.6 ft (2.62 m); minimum discharge measured, 8.10 ft^3/s (0.23 m^3/s) Sept. 17, 1964; minimum gage height at present site, 3.14 ft (0.957 m) July 16, 18, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 532 ft^3/s (15.1 m^3/s) Mar. 14 at 0345 hours, gage height, 7.46 ft (2.274 m), no other peak above base of 360 ft^3/s (10.2 m^3/s); minimum daily, 11 ft^3/s (0.31 m^3/s) Aug. 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	33	34	56	33	28	55	24	30	19	15	13
2	29	31	39	68	33	30	48	24	44	17	15	16
3	44	29	36	50	32	27	47	23	28	16	16	27
4	35	28	33	128	31	26	51	22	25	16	15	18
5	29	27	32	180	29	31	44	22	37	16	16	15
6	32	34	31	78	29	30	42	24	180	16	15	14
7	41	39	30	62	30	32	40	22	92	15	14	15
8	46	37	39	42	32	27	42	45	46	17	14	14
9	37	32	47	37	32	26	50	68	35	15	14	14
10	29	29	39	28	28	27	63	37	30	14	14	14
11	26	29	35	25	27	45	56	30	29	14	13	13
12	24	27	33	28	28	212	50	27	32	15	12	13
13	23	26	32	30	27	270	45	26	59	13	12	12
14	23	26	33	31	28	414	42	25	45	13	12	12
15	23	26	34	31	30	195	38	24	32	13	12	27
16	23	75	34	30	44	121	36	24	29	12	12	17
17	22	103	32	25	52	194	36	23	33	12	11	15
18	22	66	30	25	50	124	33	22	29	12	11	15
19	21	53	28	27	52	110	32	22	26	13	11	14
20	21	88	26	28	52	95	32	27	23	24	22	14
21	21	96	30	26	56	107	32	26	22	17	16	13
22	21	66	33	25	53	98	30	24	22	14	14	13
23	28	49	106	27	47	79	28	27	22	13	15	15
24	29	42	218	26	44	69	27	24	22	12	14	16
25	24	38	91	27	40	64	27	27	20	12	28	15
26	33	36	60	27	42	78	27	25	23	12	18	14
27	49	37	51	29	34	72	31	24	24	12	15	33
28	81	36	48	30	31	54	28	28	21	22	15	24
29	63	36	52	31	---	54	26	34	24	26	14	18
30	44	34	46	32	---	52	25	27	23	17	13	17
31	36	---	42	34	---	53	---	31	---	15	14	---
TOTAL	1004	1308	1454	1323	1046	2844	1163	858	1107	474	452	490
MEAN	32.4	43.6	46.9	42.7	37.4	91.7	38.8	27.7	36.9	15.3	14.6	16.3
MAX	81	103	218	180	56	414	63	68	180	26	28	33
MIN	21	26	26	25	27	26	25	22	20	12	11	12
CFSM	.73	.98	1.06	.96	.84	2.07	.87	.62	.83	.35	.33	.37
IN.	.84	1.10	1.22	1.11	.88	2.38	.97	.72	.93	.40	.38	.41

CAL YR 1981 TOTAL 12468 MEAN 34.2 MAX 309 MIN 11 CFSM .77 IN 10.45
WTR YR 1982 TOTAL 13523 MEAN 37.0 MAX 414 MIN 11 CFSM .83 IN 11.33

04232046 THOMAS CREEK AT FAIRPORT, NY

LOCATION.--Lat 43°06'22, long 77°27'44", Monroe County, Hydrologic Unit 04140101, on right bank 48 ft (15 m) upstream from culvert on Foreman Center Road, 0.5 mi (0.8 km) northwest of Fairport, and 0.8 mi (1.3 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--28.5 mi^2 (73.8 km^2), flow from 0.86 mi^2 (2.23 km^2) noncontributing.

PERIOD OF RECORD.--March 1980 to current year.

REVISED RECORDS.--WDR NY-81-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 403 ft (122.8 m), from topographic map.

REMARKS.--Records fair. Unpublished water-quality records are available in files of Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 161 ft^3/s (4.56 m^3/s) Feb. 20, 1981, gage height, 2.36 ft (0.719 m); maximum gage height, 3.62 ft (1.103 m) Jan. 12, 1982 (ice jam); minimum discharge, 2.0 ft^3/s (0.06 m^3/s) Aug. 19, 20, Sept. 10, 1982; minimum gage height, 1.22 ft (0.372 m) June 7, 8, 13, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 152 ft^3/s (4.30 m^3/s) Mar. 14 at 2130 hours, gage height, 2.17 ft (0.661 m), no other peak above base of 140 ft^3/s (3.96 m^3/s); maximum gage height, 3.62 ft (1.103 m) Jan. 12 (ice jam); minimum discharge, 2.0 ft^3/s (0.06 m^3/s) Aug. 19, 20, Sept. 10; minimum gage height, 1.24 ft (0.378 m) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	20	20	32	10	7.6	22	8.6	9.2	4.1	2.7	2.7
2	12	18	19	29	10	8.0	20	8.6	10	4.1	6.7	5.4
3	38	16	19	26	9.2	7.2	20	14	8.1	3.7	6.7	6.2
4	37	15	16	55	8.6	7.6	23	21	9.2	5.4	5.4	4.1
5	27	14	14	79	8.0	8.0	21	14	17	16	4.7	4.4
6	23	16	13	69	8.6	7.6	20	12	49	5.4	3.7	5.1
7	25	23	12	52	8.6	8.0	18	14	40	3.0	3.4	3.4
8	32	31	15	37	8.6	7.6	19	40	26	3.4	5.1	3.0
9	29	32	17	21	8.6	7.2	24	57	16	3.0	4.4	3.0
10	22	24	18	12	8.0	7.2	25	40	12	3.0	3.4	2.7
11	16	19	15	11	7.6	14	23	24	9.2	4.7	2.7	3.4
12	14	17	16	10	7.2	38	21	19	9.2	4.4	2.5	5.1
13	12	16	18	10	6.6	74	19	18	12	2.7	2.5	6.7
14	11	15	18	11	6.6	123	18	17	21	2.5	2.5	4.4
15	10	18	19	11	8.0	107	16	17	10	2.5	2.2	7.1
16	9.8	44	19	9.2	13	92	14	17	7.1	2.5	2.2	4.7
17	8.6	65	18	8.0	13	123	13	17	6.7	3.4	2.5	3.7
18	8.6	61	17	8.0	13	107	12	16	5.8	4.1	2.2	3.7
19	8.1	49	16	8.6	15	84	12	14	5.1	3.4	2.2	3.4
20	7.6	55	15	8.6	14	74	10	12	4.7	11	3.4	3.4
21	7.6	65	16	8.0	16	65	9.8	11	4.4	5.2	3.7	3.4
22	7.6	61	16	7.6	16	63	9.2	12	4.1	3.7	2.5	3.4
23	12	53	46	8.0	15	49	8.6	10	4.1	3.0	3.0	5.1
24	11	43	72	7.2	13	43	8.1	9.8	3.7	2.7	3.4	4.4
25	11	34	67	7.2	12	37	7.1	8.6	3.7	2.7	18	3.7
26	16	31	49	7.2	11	36	7.1	8.1	6.2	3.7	10	3.4
27	24	27	38	8.0	9.8	34	7.6	7.1	5.4	3.4	4.7	18
28	44	25	32	8.6	8.6	25	7.6	10	4.4	7.6	4.1	8.6
29	48	24	29	9.2	---	24	7.6	11	5.8	5.8	3.4	4.7
30	37	22	27	9.8	---	23	8.1	8.6	5.1	3.4	3.0	3.7
31	25	---	20	10	---	23	---	7.6	---	3.0	2.7	---
TOTAL	603.1	953	746	598.2	293.6	1334.0	450.8	504.0	334.2	136.5	129.6	144.0
MEAN	19.5	31.8	24.1	19.3	10.5	43.0	15.0	16.3	11.1	4.40	4.18	4.80
MAX	48	65	72	79	16	123	25	57	49	16	18	18
MIN	7.6	14	12	7.2	6.6	7.2	7.1	7.1	3.7	2.5	2.2	2.7
CFSM	.68	1.12	.85	.68	.37	1.51	.53	.57	.39	.15	.15	.17
IN.	.79	1.24	.97	.78	.38	1.74	.59	.66	.44	.18	.17	.19

CAL YR 1981 TOTAL 5924.6 MEAN 16.2 MAX 146 MIN 2.9 CFSM .57 IN 7.73
WTR YR 1982 TOTAL 6227.0 MEAN 17.1 MAX 123 MIN 2.2 CFSM .60 IN 8.13

04232047 IRONDEQUOIT CREEK AT LINDEN AVENUE, EAST ROCHESTER, NY

LOCATION.--Lat 43°07'16", long 77°28'36", Monroe County, Hydrologic Unit 04140101, on left bank 200 ft (61 m) upstream from bridge on Linden Avenue, 2.2 mi (3.5 km) upstream from Allen Creek, and 7.8 mi (12.6 km) upstream from mouth.

DRAINAGE AREA.--101 mi^2 (262 km^2), flow from 4.95 mi^2 (12.8 km^2) noncontributing.

PERIOD OF RECORD.--August 1973 to current year.

REVISED RECORDS.--WDR NY-78-1: 1977. WDR NY-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 341.46 ft (104.077 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Prior to 1980, flow of undetermined magnitude diverted from Erie (Barge) Canal into Thomas Creek.

AVERAGE DISCHARGE.--9 years, 96.4 ft^3/s (2.730 m^3/s), 12.96 in/yr (329 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft^3/s (41.9 m^3/s) Oct. 29, 1974, gage height, 15.64 ft (4.767 m), result of dewatering of Erie (Barge) Canal through accidental break in canal wall at Bushnell Basin; minimum, 18 ft^3/s (0.51 m^3/s) July 19, 1981, gage height, 11.15 ft (3.399 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 786 ft^3/s (22.3 m^3/s) Mar. 14 at 2300 hours, gage height, 14.22 ft (4.334 m), no other peak above base of 570 ft^3/s (16.1 m^3/s); minimum, 21 ft^3/s (0.59 m^3/s) Aug. 18, gage height, 11.16 ft (3.402 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	69	78	128	64	50	96	42	52	35	26	24
2	60	64	82	137	64	54	84	44	70	33	39	33
3	140	59	77	106	62	50	81	40	50	33	32	47
4	106	57	68	307	60	46	69	37	43	38	33	33
5	77	54	64	387	58	52	77	37	74	37	30	28
6	96	70	63	219	58	50	98	42	276	30	28	28
7	110	96	59	166	60	54	107	40	180	29	26	26
8	112	92	79	113	62	46	105	60	90	30	27	26
9	92	82	93	80	60	44	94	110	65	29	28	24
10	70	69	78	70	52	54	85	54	54	27	26	24
11	60	64	70	62	50	68	79	48	48	27	25	23
12	54	59	66	66	61	273	69	46	55	30	23	24
13	50	56	62	70	56	424	65	44	88	26	25	26
14	48	55	68	72	56	680	63	42	84	24	25	30
15	46	57	74	72	59	376	62	40	58	24	24	53
16	45	206	70	64	88	280	57	39	49	23	23	34
17	43	248	64	56	89	400	56	38	52	26	23	29
18	43	182	60	56	84	300	56	37	47	26	22	28
19	42	133	56	62	88	251	56	37	42	30	23	26
20	40	211	54	54	93	208	54	48	41	31	40	26
21	40	253	62	50	95	212	54	46	39	33	34	25
22	40	195	66	46	81	148	54	40	37	29	27	26
23	60	144	264	46	84	120	50	46	38	26	28	32
24	59	115	370	48	88	132	47	40	37	24	30	30
25	52	98	233	48	74	123	47	50	34	23	92	27
26	78	89	144	48	62	92	47	48	47	24	43	26
27	112	92	115	52	62	88	54	44	43	24	30	91
28	196	84	104	54	56	86	50	50	39	47	27	48
29	150	82	106	56	---	93	47	60	47	47	26	36
30	104	77	96	60	---	84	45	52	40	30	25	24
31	79	---	84	64	---	84	---	56	---	26	24	---
TOTAL	2356	3212	3029	2919	1926	5022	2008	1457	1919	921	934	957
MEAN	76.0	107	97.7	94.2	68.8	162	66.9	47.0	64.0	29.7	30.1	31.9
MAX	196	253	370	387	95	680	107	110	276	47	92	91
MIN	40	54	54	46	50	44	45	37	34	23	22	23
CFSM	.75	1.06	.97	.93	.68	1.60	.66	.47	.63	.29	.30	.32
IN.	.87	1.18	1.12	1.08	.71	1.85	.74	.54	.71	.34	.34	.35

CAL YR 1981 TOTAL 25199 MEAN 69.0 MAX 590 MIN 18 CFSM .68 IN 9.28
WTR YR 1982 TOTAL 26660 MEAN 73.0 MAX 680 MIN 22 CFSM .72 IN 9.82

04232050 ALLEN CREEK NEAR ROCHESTER, NY

LOCATION.--Lat 43°07'49", long 77°31'08", Monroe County, Hydrologic Unit 04140101, on right bank 525 ft (160 m) downstream from Penn Central Transportation Co. bridge, near Rochester, and about 1.3 mi (2.1 km) upstream from Irondequoit Creek.

DRAINAGE AREA.--30.1 mi² (78.0 km²), flow from 3.5 mi² (9.06 km²) noncontributing.

PERIOD OF RECORD.--November 1959 to current year.

REVISED RECORDS.--WRD NY 1974: 1972(M), 1973(M, P). WDR NY-76-1: 1960-75 (M, P), 1960-63, 1972-74.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 323.54 ft (98.615 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Discharge prior to January 1980 included undetermined diversion (maximum 20 ft³/s) from Erie (Barge) Canal upstream from station. January 1980 to present, diversion reduced to a maximum of 3 ft³/s for use by Oak Hill County Club.

AVERAGE DISCHARGE.--22 years (water years 1961-82), 33.0 ft³/s (0.934 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft³/s (92.9 m³/s) May 17, 1974, gage height, 7.42 ft (2.262 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of contracted-opening measurement of peak flow and step-backwater analysis; minimum daily, 1.7 ft³/s (0.048 m³/s) Jan. 24, 1963; minimum gage height, 1.16 ft (0.354 m) Feb. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 866 ft³/s (24.5 m³/s) Mar. 13 at 1915 hours, gage height, 4.71 ft (1.436 m), no other peak above base of 450 ft³/s (12.7 m³/s); minimum, 3.4 ft³/s (0.10 m³/s) Sept. 10, gage height, 1.87 ft (0.570 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	22	21	63	9.0	12	25	9.0	52	9.8	6.9	6.3
2	30	20	22	41	9.0	14	19	8.6	38	7.9	28	12
3	75	18	18	26	11	11	36	7.9	13	7.9	15	19
4	35	16	17	253	12	10	31	7.6	11	7.6	18	9.4
5	24	16	16	103	12	12	23	8.6	45	6.9	11	7.3
6	75	29	15	46	11	13	18	9.4	163	6.3	8.6	6.6
7	67	39	14	36	10	12	18	10	45	6.5	7.6	6.6
8	51	28	26	19	9.0	10	17	54	24	6.9	7.9	6.3
9	29	20	24	16	9.0	9.0	30	30	17	6.3	7.6	5.5
10	23	17	20	14	9.4	9.0	34	16	15	6.0	6.6	5.2
11	19	16	18	12	9.0	70	31	14	13	6.3	6.6	4.9
12	17	14	18	12	7.4	160	26	12	20	6.6	6.0	4.9
13	16	13	17	11	7.0	396	24	11	29	6.0	7.9	4.9
14	15	12	20	10	7.6	255	21	11	22	5.5	7.6	42
15	14	12	22	9.0	13	123	17	9.4	14	5.2	6.0	39
16	14	158	20	8.0	38	108	15	9.0	12	5.5	6.0	12
17	13	75	18	8.0	34	225	15	9.4	13	6.3	5.5	8.6
18	13	50	16	11	26	84	15	9.0	11	12	5.2	8.6
19	13	34	14	16	26	68	12	11	11	11	5.2	6.9
20	12	92	13	12	30	56	13	17	10	65	19	6.6
21	11	81	15	8.0	39	61	16	17	9.4	13	11	6.9
22	11	54	18	6.6	32	53	11	19	9.4	8.3	7.9	10
23	31	35	222	7.0	26	38	11	15	11	6.9	9.8	16
24	19	28	122	7.0	20	32	10	11	9.4	6.3	9.0	11
25	15	23	57	6.4	16	31	9.8	12	8.3	6.3	42	7.9
26	58	20	37	6.2	13	77	11	11	21	6.0	14	6.9
27	67	26	29	6.2	14	43	17	10	12	6.9	8.6	75
28	129	19	27	6.4	13	29	11	21	9.4	30	7.3	17
29	48	20	30	7.0	---	26	11	16	26	15	6.6	11
30	31	18	23	8.0	---	25	9.8	11	15	9.0	6.3	8.6
31	24	---	20	9.0	---	28	---	9.8	---	7.6	6.3	---
TOTAL	1023	1025	969	803.8	472.4	2100.0	557.6	426.7	708.9	316.8	321.0	392.9
MEAN	33.0	34.2	31.3	25.9	16.9	67.7	18.6	13.8	23.6	10.2	10.4	13.1
MAX	129	158	222	253	39	396	36	54	163	65	42	75
MIN	11	12	13	6.2	7.0	9.0	9.8	7.6	8.3	5.2	5.2	4.9

CAL YR 1981 TOTAL 10619.4 MEAN 29.1 MAX 617 MIN 6.8
WTR YR 1982 TOTAL 9117.1 MEAN 25.0 MAX 396 MIN 4.9

430850077304800 (0423205010) IRONDEQUOIT CREEK AT BLOSSOM ROAD, ROCHESTER, NY

LOCATION.--Lat 43°08'50", long 77°30'48", Monroe County, Hydrologic Unit 04140101, on right bank 120 ft (37 m) downstream from bridge on Blossom Road, 1.6 mi (2.6 km) east of Rochester, 2.5 mi (4.0 km) downstream from Allen Creek, and 3.6 mi (5.8 km) upstream from mouth.

DRAINAGE AREA.--143 mi² (370 km²), flow from 8.45 mi² (21.9 km²) noncontributing.

PERIOD OF RECORD.--Occasional discharge measurements water years 1977-80. December 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 246.31 ft (75.075 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair except those above 300 ft³/s (8.50 m³/s) and those for winter periods, which are poor. Discharge includes undetermined diversion from Erie (Barge) Canal. Water-quality sampling site operated by Monroe County Department of Health; data in files of that organization.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,270 ft³/s (36.0 m³/s) Feb. 20, 1981; maximum gage height, 7.66 ft (2.335 m) Feb. 20, 1981, Mar. 14, 1982; minimum discharge, 28 ft³/s (0.79 m³/s) Sept. 11, 14, 1982, gage height, 1.69 ft (0.515 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 860 ft³/s (24.4 m³/s) Mar. 14 at 0200 hours, gage height, 7.66 ft (2.335 m), no peak above base of 900 ft³/s (25.5 m³/s); minimum, 28 ft³/s (0.79 m³/s) Sept. 11, 14, gage height, 1.69 ft (0.515 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	103	117	206	64	68	155	59	114	54	37	33
2	96	96	120	180	64	68	130	59	135	47	73	42
3	236	91	108	130	66	64	160	59	76	44	56	76
4	148	84	99	494	68	64	140	61	65	46	60	47
5	111	79	93	544	64	76	120	53	121	51	50	37
6	187	113	91	289	64	78	120	42	404	47	43	36
7	202	161	85	180	62	74	110	41	218	40	38	35
8	176	132	121	140	64	68	120	117	158	41	39	34
9	131	100	136	120	64	64	170	138	116	39	42	32
10	106	69	113	94	62	64	180	106	88	37	38	31
11	92	65	112	80	60	170	162	96	75	37	36	30
12	83	61	113	66	64	482	139	111	84	42	34	30
13	76	74	118	66	66	634	128	83	127	36	39	33
14	71	95	121	68	68	833	118	68	127	34	38	59
15	68	91	128	68	86	691	106	60	86	33	34	108
16	67	383	133	64	161	507	99	56	73	32	33	53
17	64	356	117	58	149	740	95	52	74	36	32	41
18	62	245	106	58	122	517	91	49	69	47	30	39
19	62	185	100	60	119	379	86	49	61	45	32	35
20	60	309	120	62	121	317	86	56	61	136	56	33
21	57	338	110	56	148	332	93	69	57	61	52	33
22	56	262	102	54	131	307	79	65	55	43	38	38
23	102	191	455	54	120	233	74	64	55	38	39	50
24	90	158	499	54	100	201	71	57	54	35	46	45
25	74	138	315	54	90	186	67	58	48	33	147	38
26	153	124	198	54	84	285	68	55	75	33	69	35
27	201	137	157	54	80	200	78	51	65	33	44	169
28	335	120	144	56	72	150	71	69	55	84	38	77
29	203	118	149	58	---	140	65	78	81	75	36	53
30	144	110	138	60	---	142	62	58	70	48	34	43
31	117	---	119	64	---	147	---	64	---	39	33	---
TOTAL	3711	4588	4637	3645	2483	8281	3243	2103	2947	1446	1416	1445
MEAN	120	153	150	118	88.7	267	108	67.8	98.2	46.6	45.7	48.2
MAX	335	383	499	544	161	833	180	138	404	136	147	169
MIN	56	61	85	54	60	64	62	41	48	32	30	30

CAL YR 1981 TOTAL 43278 MEAN 119 MAX 1080 MIN 32
WTR YR 1982 TOTAL 39945 MEAN 109 MAX 833 MIN 30

430958077315600 (0423205023) IRONDEQUOIT CREEK AT LANDFILL NARROWS, ROCHESTER, NY

LOCATION.--Lat 43°09'58", long 77°31'56", Monroe County, Hydrologic Unit 04140101, on left bank 400 ft (120 m) east of city of Rochester corporate boundary, 0.7 mi (1.1 km) north of bridge on Browncroft Boulevard, 1.1 mi (1.8 km) upstream from mouth, and 4.9 mi (7.9 km) downstream from Allen Creek.

DRAINAGE AREA.--144 mi² (373 km²), flow from 8.45 mi² (21.9 km²) noncontributing.

PERIOD OF RECORD.--March 1981 to current year.

GAGE.--Water-stage and velocity-meter recorders. Datum of gage is 240.82 ft (73.402 m) National Geodetic Vertical Datum of 1929 (levels by Monroe County Division of Engineering).

REMARKS.--Records poor. Discharge includes undetermined diversion from Erie (Barge) Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 941 ft³/s (26.6 m³/s) Mar. 14, 1982, gage height, 8.59 ft (2.618 m); minimum daily discharge, 26 ft³/s (0.74 m³/s) July 16, 1982; minimum gage height, 5.33 ft (1.625 m) Mar. 10, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 941 ft³/s (26.6 m³/s) Mar. 14 at 0600 hours, gage height, 8.59 ft (2.618 m), no peak above base of 1,000 ft³/s (28.3 m³/s); minimum daily discharge, 26 ft³/s (0.74 m³/s) July 16; minimum gage height, 5.33 ft (1.625 m) Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	101	92	188	62	56	169	60	140	50	47	68
2	92	99	92	222	58	62	181	55	270	46	95	72
3	230	107	80	160	62	68	163	54	129	44	103	81
4	165	88	71	440	84	42	167	57	79	45	81	64
5	119	81	74	640	70	100	186	56	130	53	73	60
6	154	105	70	380	76	86	251	51	460	57	56	62
7	222	196	66	220	66	76	277	48	330	50	54	85
8	227	159	97	140	66	66	224	122	155	39	54	81
9	164	128	150	100	64	62	186	165	120	39	50	74
10	113	88	140	90	68	76	168	134	92	34	48	56
11	96	74	120	76	62	147	152	106	64	28	56	52
12	90	88	100	72	68	497	152	126	74	27	58	46
13	81	68	87	72	66	608	124	96	120	29	54	46
14	73	76	80	70	66	906	143	76	140	28	54	52
15	72	81	74	68	84	850	128	65	84	27	54	128
16	70	314	68	68	160	672	116	54	76	26	52	81
17	68	436	62	66	190	770	108	51	76	29	58	74
18	66	289	58	68	177	720	100	55	74	44	58	64
19	64	202	68	74	155	545	96	52	62	38	56	60
20	62	289	110	76	146	408	91	62	60	142	69	50
21	60	369	130	68	156	381	87	89	58	67	90	48
22	58	324	110	64	146	370	80	84	60	50	74	50
23	111	213	330	64	120	318	74	86	56	42	71	51
24	99	154	540	64	100	270	70	66	56	35	78	48
25	74	130	400	60	84	241	68	64	54	31	185	47
26	136	109	250	56	76	325	66	60	69	38	115	41
27	181	113	180	52	72	318	83	56	75	50	71	175
28	370	111	160	56	68	249	81	72	59	97	80	98
29	259	143	160	56	---	199	72	96	63	90	69	71
30	157	117	140	56	---	178	67	74	51	54	66	51
31	119	---	130	62	---	166	---	68	---	44	69	---
TOTAL	3919	4852	4289	3948	2672	9832	3930	2360	3336	1473	2198	2036
MEAN	126	162	138	127	95.4	317	131	76.1	111	47.5	70.9	67.9
MAX	370	436	540	640	190	906	277	165	460	142	185	175
MIN	58	68	58	52	58	42	66	48	51	26	47	41

WTR YR 1982 TOTAL 44845 MEAN 123 MAX 906 MIN 26

04232100 STERLING CREEK AT STERLING, NY

LOCATION.--Lat 43°19'31", long 76°38'51", Cayuga County, Hydrologic Unit 04140101, on right bank at Sterling, 25 ft (8 m) downstream from bridge on State Highway 104A, 1.8 mi (2.9 km) southwest of Sterling Valley, and 1.9 mi (3.1 km) upstream from Sterling Valley Creek.

DRAINAGE AREA.--44.4 mi² (115 km²).

PERIOD OF RECORD.--April 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 264.69 ft (80.677 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--25 years (water years 1958-82), 67.0 ft³/s (1.897 m³/s), 20.49 in/yr (520 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft³/s (67.1 m³/s) Mar. 22, 1980, gage height, 5.99 ft (1.826 m), from rating curve extended above 960 ft³/s (27.2 m³/s); minimum, 0.32 ft³/s (0.009 m³/s) Sept. 14, 1966, gage height, 1.50 ft (0.457 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 630 ft³/s (17.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 12	0630	ice jam		3.78	1.152	Mar. 23	0145	*751	21.3	*3.96	1.207

Minimum discharge, 1.7 ft³/s (0.05 m³/s) Aug. 24, gage height, 1.62 ft (0.494 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	122	96	82	54	44	224	23	18	11	7.1	2.8
2	58	90	88	84	52	37	156	19	69	11	5.7	2.8
3	67	76	81	92	58	43	131	14	50	9.9	5.7	2.8
4	66	63	74	180	82	42	133	19	35	9.2	4.6	4.6
5	64	57	67	260	74	40	106	19	29	8.5	4.6	6.4
6	63	55	63	220	70	40	96	19	83	7.9	3.6	5.7
7	72	86	58	120	70	40	80	18	84	7.9	3.6	5.1
8	81	100	67	82	68	39	76	26	74	9.9	4.1	4.6
9	81	90	72	80	66	38	92	60	54	12	4.1	4.1
10	72	76	69	80	66	34	90	48	40	11	3.6	3.6
11	64	69	66	78	66	40	88	35	31	9.9	3.6	3.2
12	58	61	63	76	66	64	92	29	24	8.5	3.2	2.8
13	51	55	63	74	60	130	86	34	19	7.9	3.6	2.8
14	47	51	64	82	58	220	83	24	21	7.1	3.2	2.8
15	42	50	66	100	52	280	74	21	18	5.7	3.2	4.1
16	37	74	66	120	68	350	67	19	19	5.1	2.8	5.1
17	33	143	63	110	220	507	63	18	17	5.1	2.8	5.7
18	31	164	60	110	120	536	64	17	16	5.1	2.5	5.7
19	34	133	58	100	84	591	58	16	14	11	2.5	4.6
20	37	200	56	98	74	558	51	18	13	28	2.5	4.6
21	35	246	54	94	64	613	47	17	13	20	2.2	4.1
22	32	239	50	90	58	696	46	17	14	13	2.5	3.6
23	38	221	100	86	56	663	42	21	14	9.9	2.2	4.6
24	46	200	138	82	54	542	38	21	12	7.9	1.9	6.4
25	45	151	133	80	54	489	35	21	11	7.1	3.2	7.1
26	64	126	120	76	50	418	34	17	13	5.7	3.2	6.4
27	173	143	110	72	48	270	32	14	12	4.6	3.6	16
28	304	136	92	68	42	173	29	14	11	6.4	3.6	20
29	313	131	84	66	---	151	27	14	11	6.4	3.6	18
30	254	117	68	60	---	143	25	12	13	6.4	3.2	13
31	175	---	70	56	---	181	---	11	---	5.7	3.2	---
TOTAL	2594	3525	2379	3058	1954	8012	2265	675	852	284.8	109.0	183.1
MEAN	83.7	118	76.7	98.6	69.8	258	75.5	21.8	28.4	9.19	3.52	6.10
MAX	313	246	138	260	220	696	224	60	84	28	7.1	20
MIN	31	50	50	56	42	34	25	11	11	4.6	1.9	2.8
CFSM	1.89	2.66	1.73	2.22	1.57	5.81	1.70	.49	.64	.21	.08	.14
IN.	2.17	2.95	1.99	2.56	1.64	6.71	1.90	.57	.71	.24	.09	.15

CAL YR 1981 TOTAL 24654.4 MEAN 67.5 MAX 1000 MIN 2.5 CFSM 1.52 IN 20.66
WTR YR 1982 TOTAL 25890.9 MEAN 70.9 MAX 696 MIN 1.9 CFSM 1.60 IN 21.69

04232400 SENECA LAKE AT WATKINS GLEN, NY

LOCATION.--Lat 42°23'00", long 76°52'05", Schuyler County, Hydrologic Unit 04140201, on east bank about 300 ft (91 m) from lake on shorter of two boat slips at Watkins Glen.

DRAINAGE AREA.--704 mi² (1,823 km²).

PERIOD OF RECORD.--October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datm of 1929 (1.59 ft or 0.485 m, Barge Canal datum). Prior to Oct. 1, 1975, at datum 438.41 ft (133.627 m) higher.

REMARKS.--Area of water surface, 67.6 mi² (175 km²). Diversion from Susquehanna River basin enters lake through Keuka Lake Outlet at Dresden. For table of diversion, see station 01528700. Lake regulated by taintor gates on Seneca River at lock 4, Waterloo, for operation of Erie (Barge) Canal and power generation by New York State Electric and Gas Corp.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 448.88 ft (136.819 m) June 25, 1972; minimum, 442.64 ft (134.917 m) Mar. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 445.66 ft (135.837 m) June 7; minimum observed, 443.25 ft (135.103 m) Feb. 26.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	444.49	445.13	444.29	444.28	444.64	444.05	445.19	444.77	445.02	445.09	444.80	444.50
2	444.47	445.13	444.26	444.32	444.58	443.95	445.16	444.78	445.09	444.98	444.75	444.43
3	444.54	445.10	444.22	444.30	444.25	443.85	445.10	444.78	445.11	444.95	444.81	444.49
4	444.48	445.05	444.18	444.35	444.25	443.85	445.14	444.77	445.14	445.01	444.74	444.47
5	444.43	444.98	444.16	444.45	444.15	443.95	445.13	444.75	445.22	445.02	444.80	444.42
6	444.46	445.00	444.12	444.47	444.12	444.02	445.15	444.73	445.54	444.98	444.81	444.42
7	444.44	445.01	444.03	444.55	444.09	444.09	445.07	444.74	445.62	444.91	444.72	444.49
8	444.47	444.94	444.02	444.54	444.05	444.15	444.98	444.79	445.60	444.91	444.76	444.41
9	444.42	444.89	444.01	444.57	444.25	444.15	444.94	444.86	445.55	444.88	444.74	444.38
10	444.37	444.79	443.97	444.54	444.25	444.02	444.91	444.87	445.46	444.84	444.78	444.37
11	444.39	444.75	443.91	444.52	444.15	443.98	444.91	444.87	445.41	444.82	444.76	444.35
12	444.38	444.71	443.88	444.54	444.08	444.15	444.93	444.88	445.35	444.83	444.75	444.36
13	444.34	444.63	443.82	444.54	444.00	444.35	444.91	444.90	445.28	444.85	444.73	444.33
14	444.29	444.58	443.78	444.58	443.93	444.55	444.94	444.90	445.24	444.82	444.69	444.33
15	444.23	444.54	443.82	444.57	443.86	444.65	444.88	444.91	445.18	444.78	444.70	444.49
16	444.27	444.64	443.84	444.55	443.78	444.71	444.81	444.90	445.15	444.79	444.65	444.50
17	444.26	444.73	443.85	444.53	443.78	444.84	444.83	444.92	445.24	444.78	444.66	444.48
18	444.16	444.73	443.88	444.51	443.78	444.91	444.88	444.91	445.24	444.76	444.69	444.42
19	444.19	444.70	443.87	444.48	443.85	444.95	444.85	444.88	445.17	444.81	444.59	444.44
20	444.19	444.74	443.87	444.51	443.84	445.02	444.83	444.90	445.11	444.87	444.61	444.37
21	444.18	444.77	443.84	444.55	443.83	445.12	444.86	444.92	445.06	444.87	444.69	444.38
22	444.19	444.75	443.87	444.53	443.82	445.24	444.84	444.92	445.00	444.82	444.56	444.40
23	444.22	444.72	443.95	444.50	443.65	445.27	444.80	444.93	444.97	444.84	444.48	444.34
24	444.20	444.69	444.07	444.54	443.75	445.26	444.81	444.94	444.94	444.83	444.58	444.35
25	444.16	444.65	444.12	444.56	443.85	445.28	444.83	444.92	444.88	444.73	444.56	444.34
26	444.15	444.56	444.15	444.57	443.58	445.33	444.84	444.91	444.90	444.79	444.55	444.34
27	444.37	444.50	444.17	444.50	443.73	445.35	444.85	444.91	444.96	444.76	444.52	444.42
28	445.01	444.47	444.20	444.49	443.89	445.30	444.85	444.92	444.96	444.76	444.56	444.44
29	445.19	444.46	444.24	444.53	---	445.25	444.80	444.95	445.02	444.87	444.50	444.47
30	445.17	444.40	444.25	444.48	---	445.19	444.79	444.96	445.11	444.77	444.40	444.43
31	445.13	---	444.23	444.58	---	445.15	---	445.00	---	444.72	444.46	---
MEAN	444.43	444.76	444.03	444.50	443.99	444.64	444.93	444.87	445.18	444.85	444.66	444.41
MAX	445.19	445.13	444.29	444.58	444.64	445.35	445.19	445.00	445.62	445.09	444.81	444.50
MIN	444.15	444.40	443.78	444.28	443.58	443.85	444.79	444.73	444.88	444.72	444.40	444.33

CAL YR 1981 MEAN 444.57 MAX 445.19 MIN 443.53
WTR YR 1982 MEAN 444.61 MAX 445.62 MIN 443.58

04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY
(Formerly published as Keuka Lake at Hammondsport)

LOCATION.--Lat 42°24'22", long 77°13'08", Steuben County, Hydrologic Unit 04140201, on left bank of Keuka Inlet at end of Liberty Street extension at Hammondsport, and 300 ft (91 m) upstream from mouth.

DRAINAGE AREA.--Keuka Inlet 25.0 mi^2 (64.8 km^2); Keuka Lake at mouth 182 mi^2 (471 km^2).

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1, 1975, at datum 710.00 ft (216.408 m) higher.

REMARKS.--Lake regulated by village of Penn Yan; prior to July 1962, by New York State Electric and Gas Corp. Area of water surface, 18.3 mi^2 (47.4 km^2). During each year, a large part of flow from 45.5 mi^2 (118 km^2) of drainage area of Mud Creek (Susquehanna River basin) is diverted into Keuka Lake for power development. For table of diversion, see station 01528700.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 719.35 ft (219.258 m) June 24, 1972; minimum daily, 711.40 ft (216.835 m) Feb. 2, 3, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 715.01 ft (217.935 m) June 7; minimum, 712.35 ft (217.124 m) Feb. 15.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	713.10	714.06	713.79	713.09	712.73	712.45	714.15	714.00	714.50	714.46	713.96	713.85
2	713.10	714.05	713.78	713.08	712.66	712.45	714.17	714.00	714.51	714.39	713.95	713.84
3	713.09	714.04	713.75	713.02	712.65	712.45	714.16	714.02	714.48	714.35	713.96	713.85
4	713.07	714.01	713.73	713.04	712.59	712.44	714.17	714.04	714.44	714.31	713.97	713.84
5	713.07	713.98	713.70	713.13	712.53	712.44	714.17	714.05	714.48	714.26	714.05	713.83
6	713.08	713.97	713.67	713.13	712.51	712.42	714.23	714.07	714.90	714.20	714.03	713.83
7	713.09	713.95	713.63	713.16	712.50	712.42	714.17	714.08	714.97	714.14	714.01	713.84
8	713.13	713.93	713.62	713.14	712.47	712.41	714.14	714.16	714.97	714.12	714.02	713.82
9	713.13	713.91	713.60	713.11	712.46	712.41	714.12	714.24	714.92	714.08	714.05	713.79
10	713.13	713.88	713.57	713.07	712.46	712.39	714.09	714.26	714.86	714.02	714.06	713.79
11	713.12	713.85	713.54	713.00	712.44	712.38	714.11	714.26	714.82	713.95	714.04	713.78
12	713.11	713.84	713.51	713.01	712.43	712.45	714.13	714.27	714.76	713.90	714.03	713.78
13	713.09	713.80	713.46	713.00	712.42	712.60	714.15	714.28	714.67	713.88	714.01	713.77
14	713.08	713.76	713.43	712.97	712.40	712.91	714.20	714.30	714.65	713.88	714.00	713.78
15	713.09	713.73	713.41	712.93	712.39	713.08	714.19	714.30	714.60	713.90	713.99	713.89
16	713.11	713.84	713.37	712.89	712.43	713.19	714.17	714.30	714.55	713.91	713.98	713.88
17	713.10	713.96	713.36	712.84	712.46	713.30	714.17	714.31	714.65	713.92	713.97	713.87
18	713.05	713.97	713.34	712.81	712.47	713.40	714.17	714.32	714.63	713.92	713.98	713.85
19	713.06	713.97	713.28	712.77	712.48	713.46	714.14	714.31	714.57	713.94	713.94	713.84
20	713.06	714.03	713.25	712.74	712.48	713.50	714.11	714.33	714.52	714.01	713.94	713.82
21	713.09	714.07	713.19	712.72	712.50	713.61	714.10	714.35	714.46	714.02	713.97	713.83
22	713.09	714.07	713.18	712.69	712.51	713.74	714.08	714.36	714.42	714.00	713.91	713.82
23	713.11	714.05	713.21	712.67	712.50	713.81	714.04	714.37	714.38	714.00	713.89	713.79
24	713.11	714.04	713.26	712.66	712.52	713.87	714.02	714.38	714.33	713.98	713.90	713.79
25	713.09	714.00	713.24	712.64	712.52	713.94	713.99	714.43	714.27	713.94	713.89	713.78
26	713.10	713.96	713.22	712.65	712.50	714.04	713.96	714.43	714.23	713.94	713.88	713.77
27	713.33	713.93	713.20	712.66	712.49	714.08	713.96	714.43	714.18	713.93	713.88	713.87
28	713.87	713.89	713.17	712.67	712.48	714.08	713.99	714.44	714.17	713.99	713.87	713.88
29	714.08	713.86	713.16	712.66	---	714.07	713.98	714.43	714.37	714.00	713.85	713.90
30	714.09	713.83	713.14	712.64	---	714.05	714.00	714.44	714.50	713.98	713.82	713.90
31	714.07	---	713.11	712.64	---	714.07	---	714.50	---	713.96	713.85	---
MEAN	713.22	713.94	713.42	712.88	712.50	713.16	714.11	714.27	714.56	714.04	713.96	713.83
MAX	714.09	714.07	713.79	713.16	712.73	714.08	714.23	714.50	714.97	714.46	714.06	713.90
MIN	713.05	713.73	713.11	712.64	712.39	712.38	713.96	714.00	714.17	713.88	713.82	713.77

CAL YR 1981 MEAN 713.64 MAX 714.63 MIN 712.10
WTR YR 1982 MEAN 713.66 MAX 714.97 MIN 712.38

04232482 KEUKA LAKE OUTLET AT DRESDEN, NY

LOCATION.--Lat 42°40'49", long 76°57'15", Yates County, Hydrologic Unit 04140201, on right bank at upstream side of bridge on Milo Street in Dresden, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--207 mi² (536 km²).

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 446.67 ft (136.145 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow regulated by village of Penn Yan. During each year a large part of flow from 45.5 mi² (118 km²) of Mud Creek drainage area (Susquehanna River basin) is diverted into Keuka Lake (Oswego River basin) for power development. For table of diversion, see station 01528700.

AVERAGE DISCHARGE.--17 years, 207 ft³/s (5.862 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s (113 m³/s) June 22, 1972, gage height, 8.37 ft (2.551 m), from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of contracted-opening measurement at Mays Mill, adjusted for intervening area; minimum, 3.2 ft³/s (0.09 m³/s) Sept. 6, 7, 8, 9, 10, 1982, gage height, -0.53 ft (-0.162 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 982 ft³/s (27.8 m³/s) June 6, gage height, 2.78 ft (0.847 m); minimum, 3.2 ft³/s (0.09 m³/s) Sept. 6, 7, 8, 9, 10, gage height, -0.53 ft (-0.162 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	380	520	430	280	380	437	24	290	430	29	5.1
2	153	380	520	420	270	380	406	24	430	422	29	4.2
3	51	380	520	400	270	380	410	24	426	414	29	4.6
4	50	380	520	380	270	380	418	23	426	406	29	3.7
5	47	380	520	360	260	380	402	23	471	398	28	3.5
6	50	380	520	340	250	380	398	23	617	394	28	3.3
7	53	380	520	330	250	380	402	23	510	384	28	3.3
8	54	380	520	320	250	380	402	37	493	373	28	3.3
9	51	380	520	310	260	380	402	40	482	362	28	3.2
10	50	380	520	290	250	380	422	28	475	351	28	3.2
11	45	380	520	280	250	380	440	25	464	346	21	4.0
12	36	380	520	270	250	380	437	25	457	340	16	4.0
13	22	380	520	260	250	380	444	24	457	160	16	4.4
14	12	380	520	250	300	380	422	24	450	34	16	5.5
15	12	380	520	250	540	380	410	23	444	33	15	34
16	12	380	520	250	300	275	406	23	444	32	15	14
17	12	470	520	240	190	440	402	23	450	31	15	8.4
18	12	520	520	240	190	356	398	23	447	31	14	7.4
19	12	520	520	240	320	356	390	23	444	31	13	7.1
20	12	520	500	240	380	367	384	41	437	31	14	6.6
21	12	520	470	240	380	406	346	79	433	30	12	6.6
22	12	520	440	240	380	402	280	83	430	30	9.0	6.6
23	12	520	480	240	380	394	285	77	426	30	7.4	6.6
24	12	520	490	240	380	402	280	62	418	30	7.4	6.6
25	30	520	490	240	380	406	269	62	414	29	5.8	6.6
26	50	520	470	240	380	433	269	39	410	29	5.3	6.6
27	50	520	470	240	380	418	132	62	402	29	5.3	16
28	50	520	480	240	380	410	40	79	406	29	5.1	9.8
29	270	520	480	250	---	406	26	79	504	29	4.6	8.4
30	380	520	470	260	---	406	24	79	447	29	4.2	7.7
31	380	---	450	270	---	430	---	103	---	29	7.1	---
TOTAL	2224	13310	15570	8800	8620	12007	10183	1327	13404	5326	512.2	214.3
MEAN	71.7	444	502	284	308	387	339	42.8	447	172	16.5	7.14
MAX	380	520	520	430	540	440	444	103	617	430	29	34
MIN	12	380	440	240	190	275	24	23	290	29	4.2	3.2

CAL YR 1981 TOTAL 50813.0 MEAN 139 MAX 520 MIN 12
WTR YR 1982 TOTAL 91497.5 MEAN 251 MAX 617 MIN 3.2

Note.- No gage-height record Oct. 20 to Jan. 12 and Jan. 14 to Mar. 14.

04233000 CAYUGA INLET NEAR ITHACA, NY

LOCATION.--Lat 42°23'35", long 76°32'43", Tompkins County, Hydrologic Unit 04140201, on left bank 0.8 mi (1.3 km) upstream from Enfield (formerly Butternut) Creek, and 5 mi (8 km) south of Ithaca.

DRAINAGE AREA.--35.2 mi² (91.2 km²).

PERIOD OF RECORD.--March 1937 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1974: 1973.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 437.16 ft (133.246 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--45 years (water years 1938-82), 38.7 ft³/s (1.096 m³/s), 14.93 in/yr (379 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s (136 m³/s) June 23, 1972, gage height, 8.10 ft (2.469 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurements at gage heights 5.5 ft (1.68 m) and 7.58 ft (2.310 m); minimum discharge, 1.7 ft³/s (0.048 m³/s) July 22, 1955; minimum gage height, 0.42 ft (0.128 m) Aug. 30, 31, Sept. 1, 2, 1939, July 22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	0445	*2,520	71.4	*5.78	1.762	Mar. 13	1700	703	19.9	2.97	0.905

Minimum discharge, 4.0 ft³/s (0.11 m³/s) Sept. 14, gage height, 0.52 ft (0.158 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	70	36	38	50	16	191	29	22	42	9.2	6.0
2	24	60	41	38	80	15	117	28	38	30	9.7	5.9
3	27	52	38	34	130	15	162	27	27	27	9.2	7.0
4	21	47	35	107	170	14	168	24	38	25	9.7	6.0
5	17	43	34	88	74	14	115	22	100	23	8.4	5.6
6	27	52	32	58	54	14	100	22	276	20	7.6	5.7
7	36	50	30	46	48	14	87	22	127	19	7.2	5.1
8	32	42	46	36	41	14	85	26	79	17	7.6	4.9
9	25	38	46	30	35	16	76	34	60	15	8.0	4.8
10	22	34	39	25	30	17	87	27	46	14	8.4	4.6
11	20	33	37	24	27	44	102	22	43	14	6.8	4.5
12	18	30	36	23	26	100	94	20	36	13	6.0	4.6
13	17	28	34	23	25	292	120	20	34	12	7.2	4.6
14	16	28	33	22	27	209	102	18	31	12	6.8	4.4
15	16	31	34	22	35	143	83	17	27	12	6.0	6.1
16	15	267	34	21	96	105	81	16	45	11	5.7	5.5
17	14	140	31	20	49	157	134	17	216	11	7.6	5.0
18	16	100	29	20	32	149	146	17	87	12	7.9	4.9
19	18	79	28	19	29	131	98	16	61	11	6.7	4.8
20	16	126	27	19	27	136	77	19	50	14	7.5	4.8
21	14	93	31	19	25	197	71	16	45	13	8.1	4.9
22	13	74	35	19	24	168	60	18	40	11	6.9	4.9
23	17	64	128	19	22	146	53	32	38	11	6.6	18
24	18	57	89	18	21	157	47	38	30	9.4	7.3	12
25	15	51	65	18	19	168	43	29	26	8.7	7.1	8.2
26	16	47	50	17	18	291	40	22	25	8.3	6.5	6.9
27	115	48	46	17	17	157	41	19	25	7.9	5.8	22
28	855	44	41	17	16	111	38	29	25	44	5.6	13
29	216	43	37	16	---	94	33	43	81	26	5.3	9.2
30	122	38	33	16	---	90	31	28	75	14	5.2	7.8
31	88	---	30	21	---	173	---	26	---	10	5.5	---
TOTAL	1907	1909	1285	910	1247	3367	2682	743	1853	517.3	223.1	211.7
MEAN	61.5	63.6	41.5	29.4	44.5	109	89.4	24.0	61.8	16.7	7.20	7.06
MAX	855	267	128	107	170	292	191	43	276	44	9.7	22
MIN	13	28	27	16	16	14	31	16	22	7.9	5.2	4.4
CFSM	1.75	1.81	1.18	.84	1.26	3.10	2.54	.68	1.76	.47	.21	.20
IN.	2.02	2.02	1.36	.96	1.32	3.56	2.83	.79	1.96	.55	.24	.22

CAL YR 1981 TOTAL 13172.0 MEAN 36.1 MAX 855 MIN 5.8 CFSM 1.03 IN 13.92
WTR YR 1982 TOTAL 16855.1 MEAN 46.2 MAX 855 MIN 4.4 CFSM 1.31 IN 17.81

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY
(Formerly published as Cayuga Lake at Ithaca)

LOCATION.--Lat 42°26'45", long 76°30'45", Tompkins County, Hydrologic Unit 04140201, on left bank of natural channel 40 ft (12 m) upstream from flood-control channel of Cayuga Inlet, at north end of Taughannock Boulevard, and 1 mi (2 km) upstream from mouth of Inlet, at Ithaca.

DRAINAGE AREA.--Cayuga Inlet 143 mi^2 (370 km^2); Cayuga Lake at mouth 1,564 mi^2 (4,051 km^2); Cayuga Lake portion 785 mi^2 (2,033 km^2).

PERIOD OF RECORD.--August 1905 to December 1909, August 1956 to current year in reports of Geological Survey. January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.43 ft or 0.436 m, Barge Canal datum). Prior to September 1925, nonrecording gage at several sites within 1 mi (2 km) of present site. Prior to October 1968, at datum 378.57 ft (115.388 m) higher. October 1968 to September 1975, at datum 376.57 ft (114.779 m) higher.

REMARKS.--Lake regulated at Mud Lock by New York State Department of Transportation. Area of water surface, 66.9 mi^2 (173 km^2). Seneca River (Cayuga and Seneca Canal) enters lake 0.5 mi (0.8 km) upstream from Mud Lock and is included in first drainage area given above.

EXTREMES FOR PERIOD OF RECORD.--(1905-25 and since 1956): Maximum elevation, 386.33 ft (117.753 m) June 26, 1972; minimum daily, 377.64 ft (115.105 m) present datum, Mar. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 383.69 ft (116.949 m) Oct 29; minimum, 378.59 ft (115.394 m) Jan. 4.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	382.32	383.34	381.34	378.94	378.92	379.04	381.80	381.84	382.50	383.14	382.34	381.84
2	382.32	383.23	381.29	378.96	378.94	379.08	381.86	381.85	382.65	383.04	382.28	381.80
3	382.37	383.10	381.25	378.78	379.13	379.08	381.76	381.86	382.71	382.92	382.36	381.86
4	382.27	382.92	381.16	378.76	379.39	378.99	381.92	381.89	382.74	382.86	382.26	381.83
5	382.22	382.72	381.10	378.93	379.45	379.07	381.93	381.88	382.82	382.74	382.32	381.79
6	382.22	382.57	381.10	378.91	379.54	379.05	382.02	381.88	383.12	382.64	382.28	381.80
7	382.33	382.53	380.85	379.03	379.50	379.10	382.03	381.88	383.28	382.64	382.21	381.85
8	382.44	382.32	380.76	378.96	379.54	379.10	381.89	381.94	383.23	382.70	382.23	381.76
9	382.42	382.20	380.77	378.97	379.59	379.06	381.80	382.02	383.18	382.72	382.21	381.75
10	382.36	382.01	380.66	378.91	379.61	379.02	381.75	382.04	383.12	382.64	382.29	381.72
11	382.35	381.88	380.52	378.86	379.59	379.05	381.74	382.02	383.15	382.57	382.23	381.70
12	382.30	381.77	380.42	378.85	379.59	379.18	381.74	382.02	383.10	382.58	382.20	381.70
13	382.23	381.66	380.29	378.82	379.60	379.44	381.68	382.05	383.03	382.63	382.18	381.66
14	382.16	381.60	380.16	378.87	379.58	379.88	381.76	382.05	383.03	382.60	382.14	381.66
15	382.11	381.55	380.06	378.85	379.56	380.08	381.72	382.05	382.96	382.56	382.14	381.85
16	382.12	381.62	379.97	378.82	379.61	380.09	381.65	382.03	382.97	382.55	382.09	381.86
17	382.00	381.83	379.78	378.82	379.62	380.28	381.60	382.06	383.11	382.50	382.12	381.84
18	381.78	381.90	379.69	378.78	379.55	380.49	381.65	382.05	383.15	382.50	382.10	381.76
19	381.81	381.90	379.52	378.77	379.55	380.69	381.55	382.04	383.11	382.52	382.02	381.79
20	381.74	381.91	379.40	378.80	379.54	380.75	381.54	382.08	383.11	382.56	382.06	381.68
21	381.75	382.03	379.18	378.81	379.54	380.83	381.63	382.15	383.06	382.54	382.09	381.70
22	381.74	382.06	379.07	378.77	379.50	380.98	381.69	382.13	383.02	382.47	381.97	381.71
23	381.75	382.02	379.14	378.74	379.44	381.08	381.68	382.13	383.03	382.49	381.90	381.68
24	381.73	381.98	379.26	378.79	379.42	381.15	381.69	382.19	382.98	382.44	381.98	381.73
25	381.64	381.94	379.29	378.78	379.35	381.26	381.69	382.28	382.88	382.34	381.97	381.70
26	381.66	381.82	379.27	378.78	379.25	381.45	381.70	382.30	382.85	382.40	381.96	381.70
27	382.02	381.72	379.22	378.75	379.19	381.60	381.80	382.31	382.82	382.34	381.90	381.78
28	383.33	381.71	379.20	378.70	379.14	381.57	381.87	382.32	382.79	382.36	381.98	381.80
29	383.68	381.67	379.20	378.73	---	381.53	381.82	382.39	382.92	382.45	381.88	381.84
30	383.60	381.55	379.10	378.69	---	381.54	381.84	382.40	383.13	382.30	381.78	381.79
31	383.45	---	378.94	378.78	---	381.58	---	382.47	---	382.30	381.84	---
MEAN	382.27	382.10	380.03	378.83	379.44	380.16	381.76	382.08	382.99	382.58	382.11	381.76
MAX	383.68	383.34	381.34	379.03	379.62	381.60	382.03	382.47	383.28	383.14	382.36	381.86
MIN	381.64	381.55	378.94	378.69	378.92	378.99	381.54	381.84	382.50	382.30	381.78	381.66

CAL YR 1981 MEAN 381.58 MAX 383.68 MIN 378.75
WTR YR 1982 MEAN 381.35 MAX 383.68 MIN 378.69

04234000 FALL CREEK NEAR ITHACA, NY

LOCATION.--Lat 42°27'12", long 76°28'23", Tompkins County, Hydrologic Unit 04140201, on left bank in Forest Home, 0.2 mi (0.3 km) east of Ithaca, 0.5 mi (0.8 km) upstream from Cornell University dam, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--126 mi^2 (326 km^2).

PERIOD OF RECORD.--July 1908 to June 1909 (gage heights only), February 1925 to current year.

REVISED RECORDS.--WSP 874: 1935-38. WSP 1912: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 795.13 ft (242.356 m) National Geodetic Vertical Datum of 1929. July 1908 to June 1909, nonrecording gage at bridge 1.2 mi (1.9 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Diversion from point about 1 mi (2 km) upstream from station by Cornell University for water supply and at several sites for irrigation purposes. Records of diversion from Fall Creek are in files of Cornell University.

AVERAGE DISCHARGE.--57 years (water years 1926-82), 186 ft^3/s (5.268 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft^3/s (439 m^3/s) July 8, 1935, gage height, 9.52 ft (2.902 m), from average of computed flow over each of four dams; maximum gage height, 11.16 ft (3.402 m) Feb. 21, 1971 (ice jam); minimum discharge, about 3 ft^3/s (0.085 m^3/s) Aug. 25, 1927, result of regulation; minimum daily, 3.6 ft^3/s (0.10 m^3/s) Aug. 17, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft^3/s (53.8 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 28	0915	*11,900	337	*8.35	2.545	Feb. 4	1900	2,280	64.6	3.96	1.207
Feb. 4	0330	ice jam		4.74	1.445						

Minimum discharge, 12 ft^3/s (0.34 m^3/s) Sept. 14, gage height, 0.33 ft (0.101 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	427	214	220	520	100	1300	135	176	221	38	24
2	258	361	305	170	600	98	646	128	224	153	37	24
3	354	310	356	160	600	96	611	125	170	128	43	17
4	373	273	273	350	1300	94	1010	114	173	118	37	13
5	242	254	242	646	1100	92	501	107	185	99	34	15
6	258	342	224	300	450	92	438	103	564	86	33	20
7	624	454	207	200	220	92	332	103	346	76	31	21
8	793	365	246	180	190	90	342	107	214	112	31	19
9	577	401	261	150	170	90	328	176	167	85	46	17
10	395	305	224	140	150	120	342	161	135	67	45	15
11	297	269	228	140	140	130	438	116	116	62	34	13
12	246	246	221	130	130	320	401	101	103	58	30	14
13	214	217	210	130	130	640	432	97	99	51	27	13
14	191	204	191	130	140	1100	495	88	95	47	27	13
15	176	207	191	130	150	720	356	79	83	73	27	18
16	159	674	191	130	260	560	319	75	90	61	24	21
17	150	716	176	130	470	660	390	73	753	49	27	20
18	142	495	176	120	260	800	799	72	305	48	26	18
19	167	472	100	120	210	814	416	67	167	51	24	17
20	164	681	160	120	170	604	314	94	145	50	23	15
21	137	597	160	110	150	870	305	103	118	53	27	15
22	123	454	180	110	140	799	273	85	107	42	24	15
23	140	361	500	100	130	591	235	150	133	37	23	53
24	207	314	646	100	120	653	207	242	114	36	24	142
25	153	281	365	100	120	761	188	179	85	34	23	57
26	137	253	250	100	120	988	176	125	76	31	24	37
27	870	269	220	98	110	660	191	99	75	29	23	85
28	7060	273	210	96	110	427	173	101	85	78	19	128
29	2240	250	190	94	---	395	150	179	390	97	18	58
30	854	235	160	90	---	460	142	123	539	51	17	41
31	558	---	150	110	---	702	---	159	---	41	18	---
TOTAL	18412	10960	7427	4904	8360	14618	12250	3666	6032	2224	884	978
MEAN	594	365	240	158	299	472	408	118	201	71.7	28.5	32.6
MAX	7060	716	646	646	1300	1100	1300	242	753	221	46	142
MIN	123	204	100	90	110	90	142	67	75	29	17	13
CFSM	4.71	2.90	1.91	1.25	2.37	3.75	3.24	.94	1.60	.57	.23	.26
IN.	5.44	3.24	2.19	1.45	2.47	4.32	3.62	1.08	1.78	.66	.26	.29

CAL YR 1981 TOTAL 83154 MEAN 228 MAX 7060 MIN 17 CFSM 1.81 IN 24.55
WTR YR 1982 TOTAL 90715 MEAN 249 MAX 7060 MIN 13 CFSM 1.98 IN 26.78

04234500 CANANDIAGUA LAKE AT CANANDAIGUA, NY

LOCATION.--Lat 42°52'19", long 77°16'22", Ontario County, Hydrologic Unit 04140201, at south end of city pier at northern end of Canandaigua Lake, 1 mi (2 km) southeast of Canandaigua.

DRAINAGE AREA.--184 mi^2 (477 km^2).

PERIOD OF RECORD.--November 1939 to current year. December 1927 to November 1939, records for site on west side of E. T. Waldorf's boathouse collected by, and in files of, city of Canandaigua.

REVISED RECORDS.--WSP 2112: Drainage area. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. June 26, 1946 to Sept. 30, 1975, at datum 681.17 ft (207.621 m) higher, and prior to June 26, 1946, nonrecording gage at E. T. Waldorf's boathouse at same datum.

REMARKS.--Lake elevation regulated by one gate on West outlet, which is a 1.5 mi (2.4 km) long canal, and by two gates on East outlet, which is the natural outlet. Sill elevations of West and East outflow structures are 684.37 ft (208.596 m) and 684.94 ft (208.770 m), respectively. Water diverted for municipal supply for villages of Newark, Palmyra, and Gorham. Records of diversion in files of city of Canandaigua. Area of water surface, 16.6 mi^2 (43.0 km^2).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 692.11 ft (210.955 m) June 24, 1972; minimum daily, 685.62 ft (208.977 m) Jan. 30, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 688.87 ft (209.968 m) June 8; minimum, 686.62 ft (209.282 m) Mar. 10-11.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	687.82	687.85	687.66	687.18	686.79	686.68	688.41	688.23	688.51	688.23	687.88	687.36
2	687.79	687.84	687.55	687.14	686.78	686.67	688.40	688.23	688.54	688.24	687.86	687.36
3	687.76	687.83	687.50	687.16	686.78	686.66	688.44	688.22	688.52	688.22	687.84	687.38
4	687.73	687.85	687.47	687.20	686.78	686.66	688.41	688.22	688.47	688.20	687.87	687.35
5	687.69	687.84	687.43	687.22	686.78	686.65	688.36	688.22	688.45	688.20	687.84	687.33
6	687.72	687.83	687.38	687.23	686.77	686.64	688.35	688.22	688.70	688.21	687.84	687.32
7	687.70	687.79	687.37	687.22	686.76	686.64	688.33	688.22	688.81	688.20	687.82	687.28
8	687.69	687.78	687.35	687.22	686.74	686.64	688.31	688.32	688.81	688.19	687.82	687.27
9	687.67	687.72	687.33	687.20	686.74	686.63	688.29	688.40	688.79	688.19	687.80	687.27
10	687.64	687.70	687.31	687.18	686.74	686.63	688.27	688.43	688.77	688.17	687.78	687.26
11	687.61	687.65	687.29	687.16	686.72	686.63	688.27	688.45	688.67	688.20	687.77	687.24
12	687.57	687.59	687.25	687.15	686.71	686.68	688.27	688.46	688.62	688.16	687.73	687.23
13	687.52	687.56	687.24	687.14	686.70	686.83	688.30	688.47	688.60	688.10	687.71	687.22
14	687.50	687.52	687.22	687.13	686.69	687.15	688.27	688.47	688.51	688.10	687.68	687.24
15	687.46	687.48	687.18	687.12	686.68	687.32	688.27	688.47	688.46	688.09	687.66	687.39
16	687.40	687.55	687.17	687.11	686.68	687.43	688.29	688.48	688.42	688.07	687.64	687.41
17	687.40	687.65	687.15	687.10	686.68	687.55	688.27	688.47	688.40	688.09	687.62	687.40
18	687.46	687.69	687.13	687.08	686.68	687.67	688.23	688.47	688.37	688.07	687.59	687.40
19	687.40	687.69	687.12	687.07	686.70	687.74	688.21	688.50	688.32	688.04	687.59	687.37
20	687.41	687.77	687.10	686.94	686.70	687.78	688.23	688.50	688.28	688.04	687.57	687.36
21	687.35	687.83	687.10	686.93	686.72	687.88	688.22	688.47	688.25	688.06	687.53	687.33
22	687.33	687.83	687.06	686.95	686.74	688.00	688.21	688.47	688.21	688.04	687.53	687.32
23	687.34	687.81	687.10	686.95	686.74	688.09	688.23	688.51	688.21	688.00	687.52	687.33
24	687.36	687.78	687.17	686.93	686.72	688.17	688.22	688.48	688.19	688.00	687.47	687.31
25	687.38	687.75	687.19	686.88	686.72	688.25	688.23	688.46	688.20	687.99	687.47	687.29
26	687.34	687.75	687.19	686.82	686.71	688.39	688.24	688.45	688.17	687.93	687.45	687.29
27	687.47	687.72	687.22	686.79	686.70	688.43	688.23	688.45	688.18	687.92	687.43	687.34
28	687.64	687.67	687.21	686.78	686.69	688.40	688.22	688.47	688.18	687.94	687.39	687.34
29	687.76	687.62	687.21	686.75	---	688.37	688.23	688.45	688.24	687.95	687.36	687.33
30	687.82	687.59	687.20	686.74	---	688.35	688.23	688.43	688.24	687.95	687.36	687.34
31	687.86	---	687.22	686.75	---	688.37	---	688.48	---	687.92	687.35	---
MEAN	687.57	687.72	687.26	687.04	686.73	687.42	688.28	688.41	688.44	688.09	687.64	687.32
MAX	687.86	687.85	687.66	687.23	686.79	688.43	688.44	688.51	688.81	688.24	687.88	687.41
MIN	687.33	687.48	687.06	686.74	686.68	686.63	688.21	688.22	688.17	687.92	687.35	687.22

CAL YR 1981 MEAN 687.79 MAX 688.56 MIN 686.63
WTR YR 1982 MEAN 687.66 MAX 688.81 MIN 686.63

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY

LOCATION.--Lat 42°55'05", long 77°13'59", Ontario County, Hydrologic Unit 04140201, on right bank at Chapin, 25 ft (8 m) upstream from bridge on State Highway 488, and 4.1 mi (6.6 km) downstream from Canandaigua Lake.

DRAINAGE AREA.--195 mi² (505 km²).

PERIOD OF RECORD.--November 1939 to current year. Prior to October 1964, published as "Canandaigua Lake Outlet."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 671.44 ft (204.655 m) National Geodetic Vertical Datum of 1929. Prior to June 25, 1974, at site 0.1 mi (0.2 km) upstream at datum 676.90 ft (206.319 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Canandaigua Lake (see station 04234500), from which water is diverted for municipal supply by villages of Newark, Palmyra, and Gorham. Monthly runoff adjusted for change in contents in Canandaigua Lake from October 1945 to September 1966.

AVERAGE DISCHARGE.--42 years (water years 1941-82), 154 ft³/s (4.361 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,710 ft³/s (48.4 m³/s) June 24, 1972, gage height, 11.08 ft (3.377 m) present datum, at site then in use; minimum, 4.6 ft³/s (0.13 m³/s) Sept. 17, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 650 ft³/s (18.4 m³/s) Mar. 13, gage height, 5.22 ft (1.591 m); maximum gage height, 6.27 ft (1.911 m) Jan. 19 (ice jam); minimum daily discharge, 16 ft³/s (0.45 m³/s) Sept. 26; minimum gage height, 3.05 ft (0.930 m) Oct. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	77	260	180	270	100	529	68	81	66	95	50
2	228	76	256	170	330	100	520	66	86	68	92	52
3	255	76	239	160	150	100	508	68	138	69	86	51
4	247	76	231	160	140	100	488	68	324	71	85	48
5	241	124	224	150	130	100	499	66	349	69	81	47
6	258	248	215	150	120	100	488	64	445	71	77	45
7	260	255	211	140	120	100	484	47	449	72	72	45
8	255	247	217	130	110	100	454	86	510	76	68	44
9	239	239	213	140	100	100	485	90	461	77	64	44
10	230	242	206	150	100	100	497	60	510	81	61	42
11	221	265	203	160	120	120	487	51	491	85	58	40
12	213	252	198	170	120	182	467	50	469	85	58	39
13	205	245	194	180	110	375	476	48	465	86	60	39
14	198	238	191	170	110	324	446	45	449	88	61	39
15	192	230	175	170	120	295	384	45	421	92	61	54
16	154	273	153	170	120	299	380	45	367	101	58	38
17	36	287	166	180	120	375	360	44	360	120	40	36
18	30	280	150	180	120	362	344	45	349	120	43	36
19	33	280	130	180	120	378	280	54	338	122	43	34
20	46	349	130	180	130	386	129	110	335	134	47	36
21	45	334	140	170	130	413	124	106	276	134	47	37
22	44	319	150	170	120	352	110	106	55	132	47	37
23	44	307	283	170	120	133	81	106	42	126	48	37
24	30	298	240	160	110	128	77	102	43	124	47	36
25	30	289	170	160	110	139	76	99	43	120	48	28
26	29	283	150	150	100	325	74	88	45	118	50	16
27	61	286	150	150	98	567	74	86	44	116	54	33
28	99	272	133	150	100	555	74	77	47	144	50	39
29	71	262	166	140	---	535	72	72	69	110	48	38
30	78	255	170	140	---	526	64	72	68	83	47	40
31	77	---	170	130	---	525	---	74	---	101	50	---
TOTAL	4372	7264	5884	4960	3648	8294	9531	2208	8129	3061	1846	1200
MEAN	141	242	190	160	130	268	318	71.2	271	98.7	59.5	40.0
MAX	260	349	283	180	330	567	529	110	510	144	95	54
MIN	29	76	130	130	98	100	64	44	42	66	40	16

CAL YR 1981 TOTAL 48939 MEAN 134 MAX 560 MIN 19
WTR YR 1982 TOTAL 60397 MEAN 165 MAX 567 MIN 16

04235250 FLINT CREEK AT PHELPS, NY

LOCATION.--Lat 42°57'28", long 77°04'06", Ontario County, Hydrologic Unit 04140201, on right bank 25 ft (8 m) downstream from bridge on Eagle Street at Phelps, and 1.1 mi (1.8 km) upstream from Canandaigua Outlet.

DRAINAGE AREA.--102 mi^2 (264 km^2).

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 523.14 ft (159.453 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Small diversion (during periods of low ground-water level) by Phelps Cement Products, Inc., located about 0.2 mile (0.3 km) upstream. Since 1967, flow from Canandaigua Lake diverted into Flint Creek for municipal supply of village of Gorham; presently not exceeding 0.3 ft^3/s (0.008 m^3/s).

AVERAGE DISCHARGE.--23 years, 90.5 ft^3/s (2.563 m^3/s), 12.05 in/yr (306 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft^3/s (83.3 m^3/s) Mar. 30, 1960, gage height, 5.83 ft (1.777 m); maximum gage height, 6.20 ft (1.890 m) Mar. 17, 1963 (ice jam); no flow for many days 1962-65, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft^3/s (30.0 m^3/s) Mar. 13 at 2400 hours, gage height, 4.40 ft (1.341 m), no other peak above base of 800 ft^3/s (22.7 m^3/s); maximum gage height, 5.11 ft (1.558 m) Mar. 14 (ice jam); minimum discharge, 1.3 ft^3/s (0.37 m^3/s) Sept. 12, 14, gage height, 0.83 ft (0.253 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	152	78	78	30	40	256	36	80	63	5.7	4.1
2	22	114	78	84	30	37	307	34	83	37	5.7	5.4
3	45	90	80	70	32	38	226	32	67	28	5.2	6.0
4	45	77	75	150	38	40	200	30	48	24	5.4	4.8
5	42	67	70	250	38	33	178	29	59	22	12	3.9
6	37	67	64	200	40	29	140	28	395	19	10	3.7
7	45	77	60	150	41	29	92	28	517	16	9.1	3.2
8	72	80	72	84	40	28	108	58	469	16	7.1	3.0
9	75	73	92	76	40	29	146	142	297	13	6.2	3.0
10	63	63	72	70	39	29	165	114	156	11	5.4	2.4
11	49	57	76	42	38	32	214	75	106	10	7.4	2.0
12	41	51	72	26	33	140	208	60	80	9.9	8.0	1.7
13	34	46	70	29	33	440	197	53	66	8.7	5.7	2.1
14	31	43	72	38	32	720	200	47	61	7.4	4.5	1.8
15	28	42	75	42	31	660	190	41	55	7.1	3.9	12
16	26	116	77	47	37	600	156	38	47	7.4	4.1	61
17	25	280	68	47	62	580	140	36	65	7.4	3.4	74
18	24	293	60	47	140	500	135	33	81	6.5	2.7	32
19	23	226	29	38	100	440	116	33	61	6.8	2.1	19
20	22	297	52	38	70	395	95	33	48	7.7	5.4	14
21	22	340	58	37	64	477	84	35	41	12	3.7	11
22	21	283	52	36	52	527	74	34	35	14	2.9	7.9
23	23	197	180	34	50	482	66	38	33	8.7	3.2	7.7
24	26	150	340	32	47	403	59	45	40	6.5	6.0	6.7
25	28	127	220	31	45	364	53	39	32	5.0	5.7	7.4
26	28	110	160	29	43	415	52	35	28	4.1	3.6	6.8
27	94	102	120	29	42	391	50	31	26	3.6	2.4	13
28	425	95	100	29	41	283	46	28	25	12	2.4	22
29	522	92	100	28	---	202	41	27	38	11	2.4	24
30	419	83	82	26	---	178	38	27	69	12	2.1	18
31	242	---	60	28	---	187	---	31	---	8.4	2.5	---
TOTAL	2619	3890	2864	1945	1328	8748	4032	1350	3208	425.2	155.9	383.6
MEAN	84.5	130	92.4	62.7	47.4	282	134	43.5	107	13.7	5.03	12.8
MAX	522	340	340	250	140	720	307	142	517	63	12	74
MIN	20	42	29	26	30	28	38	27	25	3.6	2.1	1.7
CFSM	.83	1.28	.91	.62	.47	2.77	1.31	.43	1.05	.13	.05	.13
IN.	.96	1.42	1.04	.71	.48	3.19	1.47	.49	1.17	.16	.06	.14

CAL YR 1981 TOTAL 25907.2 MEAN 71.0 MAX 869 MIN 3.2 CFSM .70 IN 9.45
WTR YR 1982 TOTAL 30948.7 MEAN 84.8 MAX 720 MIN 1.7 CFSM .83 IN 11.29

04235396 OWASCO LAKE NEAR AUBURN, NY

LOCATION.--Lat 42°53'56", long 76°32'17", Cayuga County, Hydrologic Unit 04140201, on east side of breakwater at city of Auburn water intake and pumping station, 1 mi (2 km) south of city limits of Auburn, and 1.8 mi (2.9 km) upstream from State dam.

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--October 1967 to current year. Records since 1912 collected by, and in files of, city of Auburn.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 1, 1982, nonrecording gage read once daily by employees of city of Auburn Water Division at same site and datum. Reference mark at elevation 718.59 ft (219.026 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Lake elevation regulated by gates on outlet at State dam. Area of water surface, 10.6 mi² (27.5 km²).

COOPERATION.--Records furnished by city of Auburn until April 30, 1982.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 716.88 ft (218.505 m) June 25, 1972; minimum observed, 708.58 ft (215.975 m) Feb. 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum observed elevation since 1912, 716.91 ft (218.514 m) Mar. 23, 1936, Apr. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 714.58 ft (217.804 m) Oct. 29; minimum observed, 709.00 ft (216.103 m) Mar. 8.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
INSTANTANEOUS OBSERVATIONS AT 0700

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	712.51	713.75	712.31	711.56	710.23	709.47	712.19	711.90	712.71	712.79	712.30	711.90
2	712.52	713.35	712.34	711.51	710.20	709.42	712.20	711.86	712.73	712.99	712.30	711.90
3	712.58	713.07	712.33	711.46	710.21	709.35	712.15	711.80	712.79	712.81	712.30	711.89
4	712.78	712.74	712.35	711.51	710.30	709.32	712.11	711.80	712.75	712.67	712.27	711.87
5	712.85	712.83	712.31	711.60	710.35	709.20	712.00	711.82	712.73	712.71	712.27	711.87
6	712.90	712.55	712.28	711.70	710.39	709.18	712.02	711.87	712.83	712.67	712.27	711.86
7	713.00	712.55	712.25	711.69	710.38	709.15	711.98	711.90	712.96	712.59	712.25	711.82
8	713.08	712.46	712.25	711.64	710.33	709.00	711.94	711.89	712.98	712.58	712.24	711.80
9	713.05	712.45	712.25	711.60	710.31	709.10	711.90	711.94	712.94	712.49	712.27	711.80
10	712.78	712.60	712.24	711.50	710.32	709.31	711.85	711.99	712.99	712.56	712.26	711.79
11	712.67	712.59	712.22	711.45	710.23	709.30	711.85	712.01	712.85	712.51	712.24	711.90
12	712.57	712.60	712.25	711.37	710.18	709.32	711.85	712.13	712.87	712.49	712.22	711.89
13	712.63	712.64	712.12	711.34	710.15	709.40	711.98	712.05	712.75	712.49	712.19	711.87
14	712.65	712.63	712.05	711.30	710.10	709.81	712.00	712.06	712.73	712.47	712.20	711.84
15	712.66	712.63	712.02	711.22	710.03	710.14	712.00	712.04	712.65	712.48	712.19	711.76
16	712.63	712.73	711.95	711.19	709.99	710.31	712.03	712.07	712.48	712.49	712.17	711.91
17	712.62	712.83	711.91	711.12	709.98	710.47	712.08	712.09	712.47	712.49	712.16	711.75
18	712.68	712.70	711.80	711.05	709.95	710.75	712.15	712.19	712.53	712.51	712.14	711.83
19	712.59	712.60	711.80	710.98	709.92	711.00	712.25	712.21	712.58	712.51	712.14	711.71
20	712.60	712.54	711.79	710.91	709.91	711.08	712.27	712.24	712.39	712.52	712.10	711.83
21	712.53	712.55	711.71	710.83	709.88	711.16	712.26	712.18	712.46	712.49	712.11	711.69
22	712.50	712.42	711.66	710.76	709.84	711.45	712.27	712.19	712.46	712.51	712.09	711.67
23	712.50	712.37	711.68	710.75	709.80	711.47	712.26	712.26	712.36	712.46	712.10	711.67
24	712.50	712.37	711.80	710.76	709.77	711.74	712.25	712.38	712.35	712.48	712.04	711.68
25	712.49	712.36	711.84	710.58	709.69	711.97	712.24	712.26	712.48	712.48	712.08	711.90
26	712.47	712.37	711.81	710.50	709.64	712.11	712.20	712.23	712.39	712.31	712.05	711.88
27	712.71	712.41	711.78	710.41	709.59	712.14	712.15	712.25	712.37	712.28	712.05	711.79
28	713.43	712.45	711.76	710.35	709.57	712.00	712.12	712.37	712.41	712.41	712.00	711.96
29	714.58	712.38	711.71	710.28	---	711.88	712.09	712.30	712.48	712.31	711.98	711.85
30	714.33	712.30	711.66	710.21	---	711.95	711.95	712.36	712.79	712.37	711.97	711.97
31	714.00	---	711.61	710.18	---	711.95	---	712.48	---	712.40	711.92	---
MEAN	712.85	712.63	711.99	711.07	710.04	710.45	712.09	712.10	712.64	712.53	712.16	711.83
MAX	714.58	713.75	712.35	711.70	710.39	712.14	712.27	712.48	712.99	712.99	712.30	711.97
MIN	712.47	712.30	711.61	710.18	709.57	709.00	711.85	711.80	712.35	712.28	711.92	711.67

CAL YR 1981 MEAN 712.10 MAX 714.58 MIN 709.59
WTR YR 1982 MEAN 711.88 MAX 714.58 MIN 709.00

04235500 OWASCO OUTLET NEAR AUBURN, NY

LOCATION.--Lat 42°56'48", long 76°35'56", Cayuga County, Hydrologic Unit 04140201, on left bank 2.5 mi (4.0 km) downstream from center of Auburn, and 4 mi (6 km) downstream from State dam at outlet of Owasco Lake.

DRAINAGE AREA.--206 mi² (534 km²).

PERIOD OF RECORD.--November 1912 to current year. Prior to October 1966, published as "Owasco Lake Outlet."

REVISED RECORDS.--WSP 824: 1913-14, 1916, 1920(M), 1922(M), 1928(M), 1929, 1932(M). WSP 2112: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 533.92 ft (162.739 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for periods of no gage-height record Oct. 1 to Nov. 5 and Dec. 23 to Feb. 18, which are poor. Diurnal fluctuation caused by mills in Auburn; regulation at State dam at outlet of lake.

AVERAGE DISCHARGE.--69 years (water years 1914-82), 289 ft³/s (8.184 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft³/s (92.0 m³/s) June 23, 1972, gage height, 6.28 ft (1.914 m); minimum, about 2 ft³/s (0.057 m³/s) Dec. 5, 1936; minimum gage height, 1.09 ft (0.332 m) Aug. 28, 1981; minimum daily discharge, 5 ft³/s (0.14 m³/s) Nov. 11, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,670 ft³/s (47.3 m³/s) Nov. 17, gage height, 3.88 ft (1.183 m), may have been higher during flood of Oct. 29; minimum, 13 ft³/s (0.37 m³/s) May 16, gage height, 1.09 ft (0.332 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	1500	383	340	280	312	890	354	129	343	34	33
2	200	1400	377	310	270	317	1020	349	120	354	100	36
3	210	1300	371	320	270	320	814	252	300	343	32	38
4	210	800	359	320	270	319	975	53	316	349	32	33
5	200	1000	342	360	270	316	717	75	332	338	36	32
6	270	1020	377	410	280	316	572	57	338	332	34	32
7	620	879	383	410	270	313	551	53	338	192	33	33
8	1000	901	340	400	270	253	551	75	371	77	41	32
9	1200	281	320	380	270	52	538	75	383	200	79	32
10	1100	139	380	370	270	49	531	72	389	311	26	30
11	800	436	443	350	270	53	538	61	383	166	21	30
12	380	281	506	410	270	109	473	63	389	52	23	32
13	190	287	484	290	270	282	454	75	383	53	30	32
14	240	276	409	300	260	329	460	135	349	52	29	34
15	240	281	403	330	260	329	467	38	338	50	30	44
16	240	697	422	300	260	343	407	44	349	53	38	30
17	240	1340	422	330	270	358	354	70	343	48	89	29
18	240	1360	416	430	300	355	354	61	327	50	33	27
19	250	1290	390	300	329	533	366	66	332	46	29	27
20	260	1330	377	300	327	702	371	59	327	42	36	27
21	250	1440	403	300	328	576	407	59	266	42	27	27
22	250	1140	544	330	324	697	401	61	89	41	27	27
23	260	765	500	300	322	575	354	59	50	39	27	41
24	250	600	420	300	321	331	349	166	77	38	27	29
25	250	383	470	300	320	557	349	295	63	36	29	27
26	260	371	460	310	317	992	349	162	68	89	27	27
27	680	149	450	310	316	1080	360	87	63	70	26	53
28	1500	491	430	270	314	1050	366	48	68	68	33	30
29	1600	567	410	250	---	649	354	32	225	36	61	29
30	1600	484	420	270	---	562	354	38	338	42	59	29
31	1600	---	370	260	---	687	---	53	---	34	39	---
TOTAL	16760	23188	12781	10160	8098	13716	15046	3147	7843	3986	1187	962
MEAN	541	773	412	328	289	442	502	102	261	129	38.3	32.1
MAX	1600	1500	544	430	329	1080	1020	354	389	354	100	53
MIN	170	139	320	250	260	49	349	32	50	34	21	27

CAL YR 1981 TOTAL 112074 MEAN 307 MAX 1600 MIN 20
WTR YR 1982 TOTAL 116874 MEAN 320 MAX 1600 MIN 21

04236000 SKANEATELES LAKE AT SKANEATELES, NY

LOCATION.--Lat 42°56'42", long 76°25'46", Onondaga County, Hydrologic Unit 04140201, on east side of breakwater, enclosed in city of Syracuse boathouse, at Skaneateles.

DRAINAGE AREA.--72.7 mi² (188 km²).

PERIOD OF RECORD.--October 1967 to current year. Records since September 1890 collected by, and in files of, city of Syracuse.

GAGE.--Nonrecording gages read once daily by employees of Syracuse Water Division. Datum of gage is National Geodetic Vertical Datum of 1929. October 1967 to September 1975, at same site at datum 801.75 ft (244.373 m) higher.

REMARKS.--Lake elevation regulated by gates at outlet by Syracuse Water Division. Area of water surface, 13.6 mi² (35.2 km²).

COOPERATION.--Records furnished by city of Syracuse.

EXTREMES FOR PERIOD OF RECORD.--(since 1890): Maximum observed elevation, 866.95 ft (264.246 m) June 25, 26, 1972; minimum observed, 858.90 ft (261.793 m) Nov. 15, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 864.72 ft (263.567 m) July 1; minimum observed, 861.34 ft (262.536 m) Oct. 1.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	861.34	862.85	863.43	863.48	863.20	862.93	864.18	864.39	864.32	864.72	864.04	863.25
2	861.37	862.80	863.43	863.50	863.18	862.93	864.23	864.39	864.33	864.70	864.01	863.24
3	861.35	862.80	863.42	863.50	863.15	862.91	864.25	864.38	864.36	864.69	864.00	863.21
4	861.40	862.80	863.43	863.50	863.12	862.92	864.30	864.35	864.37	864.66	863.98	863.19
5	861.40	862.79	863.42	863.48	863.09	862.90	864.30	864.35	864.37	864.63	863.96	863.15
6	861.40	862.79	863.42	863.46	863.09	863.00	864.35	864.34	864.48	864.61	863.95	863.13
7	861.41	862.80	863.42	863.58	863.07	862.96	864.32	864.32	864.50	864.59	863.94	863.11
8	861.43	862.90	863.41	863.64	863.05	862.95	864.30	864.32	864.51	864.56	863.93	863.07
9	861.61	862.91	863.42	863.65	863.04	862.95	864.29	864.33	864.51	864.54	863.91	863.05
10	861.63	862.92	863.42	863.63	863.03	862.96	864.25	864.35	864.50	864.52	863.89	863.02
11	861.70	862.92	863.40	863.61	863.03	862.95	864.23	864.35	864.50	864.50	863.88	863.00
12	861.72	862.93	863.40	863.61	863.07	862.91	864.22	864.33	864.50	864.48	863.85	862.98
13	861.74	862.93	863.41	863.59	863.05	862.92	864.21	864.31	864.50	864.47	863.80	862.96
14	861.75	862.92	863.41	863.56	863.04	863.07	864.19	864.30	864.49	864.44	863.78	862.94
15	861.76	862.93	863.41	863.53	863.03	863.13	864.19	864.29	864.49	864.43	863.76	862.91
16	861.77	862.97	863.41	863.50	863.06	863.20	864.18	864.27	864.48	864.40	863.74	862.96
17	861.74	863.05	863.40	863.44	863.05	863.35	864.18	864.25	864.51	864.37	863.72	862.94
18	861.75	863.09	863.40	863.40	863.01	863.40	864.30	864.25	864.51	864.35	863.67	862.90
19	861.75	863.19	863.41	863.34	863.02	863.49	864.34	864.24	864.51	864.34	863.65	862.86
20	861.73	863.25	863.40	863.32	863.01	863.51	864.38	864.28	864.51	864.31	863.59	862.82
21	861.73	863.36	863.40	863.22	863.00	863.55	864.35	864.25	864.50	864.29	863.61	862.80
22	861.69	863.38	863.39	863.18	863.01	863.65	864.35	864.25	864.50	864.25	863.59	862.74
23	861.69	863.42	863.41	863.15	863.02	863.69	864.37	864.25	864.50	864.20	863.56	862.72
24	861.70	863.42	863.44	863.30	863.00	863.72	864.38	864.25	864.49	864.17	863.52	862.80
25	861.70	863.41	863.50	863.22	862.99	863.78	864.38	864.28	864.48	864.15	863.49	862.79
26	861.68	863.41	863.48	863.19	862.99	863.81	864.40	864.28	864.48	864.13	863.45	862.77
27	861.85	863.40	863.46	863.17	862.97	863.82	864.40	864.28	864.49	864.10	863.43	862.77
28	862.35	863.45	863.47	863.12	862.95	863.93	864.39	864.27	864.47	864.08	863.39	862.77
29	862.65	863.44	863.48	863.09	---	863.93	864.39	864.28	864.45	864.08	863.33	862.75
30	862.70	863.44	863.48	863.09	---	863.97	864.39	864.27	864.63	864.07	863.30	862.73
31	862.75	---	863.48	863.06	---	864.18	---	864.32	---	864.05	863.27	---
MEAN	861.75	863.09	863.43	863.39	863.05	863.33	864.30	864.30	864.47	864.38	863.71	862.94
MAX	862.75	863.45	863.50	863.65	863.20	864.18	864.40	864.39	864.63	864.72	864.04	863.25
MIN	861.34	862.79	863.39	863.06	862.95	862.90	864.18	864.24	864.32	864.05	863.27	862.72

CAL YR 1981	MEAN 861.95	MAX 863.50	MIN 860.43
WTR YR 1982	MEAN 863.51	MAX 864.72	MIN 861.34

04237500 SENECA RIVER AT BALDWINSVILLE, NY

LOCATION.--Lat 43°09'25", long 76°19'55", Onondaga County, Hydrologic Unit 04140201, on left bank 200 ft (61m) downstream from bridge on State Highway 31 in Baldwinsville, and 400 ft (122 m) downstream from navigation dam at Lock 24 of New York State Erie (Barge) Canal.

DRAINAGE AREA.--3,138 mi^2 (8,127 km^2).

PERIOD OF RECORD.--November 1949 to current year in reports of Geological Survey. November 1898 to December 1908, prior to construction of Erie (Barge) Canal, not equivalent to later records at same site because of extensive development of Erie (Barge) Canal system. January 1909 to September 1925 (gage heights only) in reports of State Engineer and Surveyor.

REVISED RECORDS.--WDR NY-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 361.38 ft (110.149 m) Natinal Geodetic Vertical Datum of 1929 (362.60 ft or 110.520 m, Barge Canal Datum). Prior to Dec. 31, 1908, nonrecording gage at same site at different datum. Auxiliary water-stage recorder 1,500 ft (457 m) downstream from base gage at same datum.

REMARKS.--Records fair. Discharge from 1898 to 1908 determined on basis of head on dam, flow through 10 mills nearby, lockages at Oswego Canal lock, estimated leakage of dam, wheel gates, flumes, and penstocks; not adjusted for inflow from Lake Erie through Erie (Barge) Canal. Discharge since November 1949, computed by using fall as determined by auxiliary water-stage recorder, represents total discharge at Baldwinsville and includes flow in Erie (Barge) Canal.

A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in river basin. Large diurnal fluctuations at low and medium flows caused by powerplants upstream from station. Seneca River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. During part of year, entire flow from 45.5 mi^2 (118 km^2) of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin (see station 01529000).

COOPERATION.--Records of lockages at lock 24 furnished by New York State Department of Transportation (since November 1949).

AVERAGE DISCHARGE.--32 years (water years 1951-82), 3,469 ft^3/s (98.24 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 17,200 ft^3/s (487 m^3/s) Apr. 4, 1960, June 28, 1972; maximum gage height, 9.21 ft (2.807 m) Apr. 4, 1960, June 30, 1972; minimum daily discharge, 237 ft^3/s (6.71 m^3/s) Nov. 10, 1957; minimum gage height, 0.70 ft (0.213 m) Feb. 20, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 11,400 ft^3/s (323 m^3/s) Nov. 1; maximum gage height, 6.09 ft (1.856 m) Oct. 31; minimum daily discharge, 381 ft^3/s (10.8 m^3/s) Sept. 9; minimum gage height, 1.03 ft (0.314 m) Aug 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3590	11400	7010	5390	1700	2730	6900	1480	712	3980	750	401
2	3740	10900	6980	5210	1620	2690	6820	1400	1160	4090	1620	789
3	3880	10200	6950	4990	1620	1860	6880	1380	1300	4040	1130	1170
4	4000	9690	7020	5030	1880	1320	7150	1280	1410	3950	457	622
5	4140	8970	7050	5660	2180	1250	6750	1120	1350	3520	846	446
6	4220	8790	6970	5910	2610	1360	6510	946	2210	3130	398	793
7	4530	8640	6780	5930	2820	1320	6440	874	4270	2880	1080	1050
8	5210	8470	6710	5520	3120	1330	6410	1040	6110	3150	1000	577
9	5500	8520	6860	5010	3080	1220	6560	1170	6140	2500	526	381
10	5580	8190	6950	7350	3260	1060	6760	1480	6740	2180	1020	785
11	5430	8000	6840	7420	3380	782	6850	1660	6430	1990	1000	566
12	4970	7720	6840	6900	3200	1380	6870	1510	5780	1890	582	801
13	3980	6920	6820	6660	3040	2240	6890	1360	5320	1320	738	952
14	3470	6410	6760	5880	2890	4730	6810	1180	5130	1200	958	532
15	3820	6120	6680	5010	2940	7030	6440	1050	5050	1230	565	650
16	4020	5950	6620	4560	2930	8660	6290	922	5020	1260	668	1120
17	4000	6470	6300	4310	3180	9930	6180	901	4880	1190	944	599
18	3940	7240	6160	4010	3380	10400	6030	758	4820	974	542	494
19	3900	7790	6070	2230	3900	10700	5550	900	4900	1090	698	1050
20	3000	7900	5930	2250	4190	10500	4480	730	4970	1100	948	623
21	1990	8480	5690	2330	4140	10300	3550	1010	4740	1240	633	822
22	1990	8980	4870	2390	4160	10000	2850	988	4420	866	548	621
23	1920	8960	4550	2260	4080	9570	2170	870	4150	1210	506	805
24	2080	8560	5160	2330	4280	9210	1900	946	4000	1130	926	1020
25	2030	8150	5970	2240	4140	8510	1720	1060	3740	1100	898	627
26	1850	7720	6150	2140	3800	8370	944	1090	2830	1050	698	760
27	2970	7640	6010	1970	3240	8240	1010	871	2090	622	676	1180
28	5520	7440	5870	1860	2940	8090	1230	514	2000	886	712	1240
29	8270	7340	5650	1880	---	7840	1280	634	2310	1170	606	1220
30	10200	7280	5430	1880	---	7220	1480	1010	3030	991	680	1170
31	11200	---	5450	1770	---	6910	---	1080	---	619	670	---
TOTAL	134940	244840	195100	128280	87700	176752	147704	33214	117012	57548	24023	23866
MEAN	4353	8161	6294	4138	3132	5702	4923	1071	3900	1856	775	796
MAX	11200	11400	7050	7420	4280	10700	7150	1660	6740	4090	1620	1240
MIN	1850	5950	4550	1770	1620	782	944	514	712	619	398	381

CAL YR 1981	TOTAL	1191093	MEAN	3263	MAX	11400	MIN	721
WTR YR 1982	TOTAL	1370979	MEAN	3756	MAX	11400	MIN	381

04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY

LOCATION.--Lat 42°55'51", long 76°10'24", Onondaga County, Hydrologic Unit 04140201, at Onondaga Dam on Onondaga Creek, 3.5 mi (5.6 km) southwest of Nedrow, 4 mi (6 km) south of Syracuse, and 10.5 mi (16.9 km) upstream from Onondaga Lake.

DRAINAGE AREA.--67.7 mi^2 (175 km^2).

PERIOD OF RECORD.--June 1949 to September 1952 (monthly elevations and contents), October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by a rolled earthfill dam, completed by Corps of Engineers in August 1949 for flood control; first used for flood regulation about a year prior to completion. Usable capacity, 18,200 acre-ft (22.5 hm^3) between elevations 457.0 ft (139.29 m), conduit invert at intake, and 504.5 ft (153.77 m), crest of spillway. No dead storage. The flood-control works consist of a pressure conduit and a side-channel spillway and are not provided with gates. Water is stored during high flows and released gradually. Storage includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin.

COOPERATION.--Capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 485.9 ft (148.10 m) Apr. 1, 1960, contents, 5,960 acre-ft (7.35 hm^3); no contents at times.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 479.58 ft (146.176 m) Oct. 29, contents, 3,378 acre-ft (4.17 hm^3); minimum elevation, 459.90 ft (140.178 m) Sept. 14, no contents many days.

Capacity table (elevation, in feet, and contents, in acre-feet)

460.00	0	470.00	700
461.00	5	473.00	1,420
462.00	15	478.00	2,880
464.00	50	482.00	4,230
467.00	225	486.00	6,010

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460.67	467.39	461.51	461.52	461.71	460.95	467.72	461.20	461.51	461.66	460.23	460.04
2	460.72	462.43	461.54	461.73	461.91	460.74	466.19	461.13	462.07	461.01	460.32	460.03
3	460.85	461.86	461.52	462.44	461.79	460.75	464.53	461.06	461.22	460.85	460.58	460.02
4	460.92	461.65	461.43	462.36	463.70	460.65	465.21	460.98	460.96	460.76	460.24	460.01
5	460.75	461.53	461.34	465.05	462.45	460.71	464.12	460.93	460.91	460.65	460.17	460.00
6	460.99	461.88	461.30	463.45	461.73	460.68	463.83	460.90	462.36	460.56	460.14	459.98
7	462.31	462.28	461.24	462.50	461.15	460.70	463.13	460.89	462.30	460.53	460.11	459.96
8	464.80	462.25	461.39	461.89	461.13	460.61	463.27	460.90	461.44	461.70	460.12	459.96
9	464.22	462.47	461.61	462.32	461.00	460.70	462.95	461.74	461.05	460.81	460.80	459.95
10	462.52	462.09	461.47	461.53	460.90	460.71	463.00	461.74	460.87	460.59	460.36	459.94
11	461.70	461.81	461.38	461.60	460.82	461.28	463.49	461.14	460.75	460.48	460.20	459.93
12	461.36	461.60	461.33	461.09	460.89	464.39	463.49	460.93	460.65	460.43	460.13	459.92
13	461.16	461.41	461.28	461.09	460.81	466.17	463.87	460.86	460.61	460.37	460.10	459.91
14	461.03	461.33	461.25	461.18	460.76	469.83	465.08	460.77	460.58	460.33	460.08	459.90
15	460.92	461.29	461.24	461.12	460.77	468.23	463.85	460.70	460.52	460.34	460.06	460.43
16	460.85	461.60	461.24	461.07	461.24	465.33	463.14	460.64	460.52	460.42	460.04	460.64
17	460.79	462.92	461.19	460.88	461.62	465.05	463.28	460.61	461.41	460.41	460.02	460.18
18	460.74	462.43	461.15	460.88	461.16	466.08	464.93	460.58	461.04	460.43	460.02	460.06
19	460.83	462.39	461.36	460.88	461.11	466.20	463.67	460.57	460.78	460.51	460.01	460.01
20	460.83	463.89	461.05	460.88	460.99	464.90	462.68	460.80	460.68	460.39	460.00	460.00
21	460.72	464.67	461.04	460.83	460.98	465.23	463.14	460.68	460.62	460.32	460.05	459.99
22	460.64	463.59	461.06	460.70	461.00	466.02	462.58	460.57	460.60	460.27	460.03	459.97
23	460.83	462.80	462.76	460.75	460.95	465.07	462.21	460.97	460.56	460.22	460.02	460.36
24	461.22	462.40	464.24	460.84	460.91	464.64	461.94	461.02	460.52	460.18	460.01	460.68
25	460.95	462.12	462.88	460.82	461.23	465.23	461.75	460.81	460.45	460.15	460.02	460.33
26	460.84	461.89	462.02	460.74	460.85	466.68	461.63	460.67	460.42	460.14	460.08	460.14
27	464.40	461.98	461.73	460.69	460.78	466.04	461.73	460.56	460.46	460.12	460.05	460.67
28	474.03	461.99	461.67	460.69	460.75	463.99	461.57	460.53	460.42	460.22	460.03	460.72
29	478.94	461.84	461.62	460.68	---	463.45	461.42	460.65	463.65	460.56	460.01	460.35
30	476.03	461.64	461.47	460.67	---	463.69	461.30	460.57	466.17	460.35	460.00	460.17
31	472.23	---	461.28	460.70	---	465.10	---	461.92	---	460.26	459.99	---
MEAN	463.22	462.38	461.57	461.41	461.25	463.86	463.36	460.90	461.20	460.52	460.13	460.14
MAX	478.94	467.39	464.24	465.05	463.70	469.83	467.72	461.92	466.17	461.70	460.80	460.72
MIN	460.64	461.29	461.04	460.67	460.75	460.61	461.30	460.53	460.42	460.12	459.99	459.90
†	737	7.8	6.6	3.6	3.7	208	6.1	16.3	29.3	1.2	0.1	0.7
††	+11.9	-12.3	-.02	-.05	0	+3.3	-3.4	+.17	+.22	-.46	-.02	+.01

CAL YR 1981 MEAN 461.29 MAX 478.94 MIN 459.83 †† +.01
WTR YR 1982 MEAN 461.66 MAX 478.94 MIN 459.90 †† 0

† Contents, in acre-feet, at end of month.
†† Change in contents, equivalent in cubic feet per second.

04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY

LOCATION.--Lat 42°59'00", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, on left bank 550 ft (168 m) upstream from bridge on Dorwin Avenue, at Syracuse, and 4 mi (6 km) downstream from Onondaga Reservoir.

DRAINAGE AREA.--88.5 mi^2 (229 km^2).

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.19 ft (126.245 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. The adjusted and unadjusted yearly means are the same for each year of record.

AVERAGE DISCHARGE.--31 years, 125 ft^3/s (3.540 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft^3/s (92.3 m^3/s) July 3, 1974, gage height, 6.48 ft (1.975 m); minimum daily, 5.5 ft^3/s (0.16 m^3/s) Aug. 17, 1965; minimum gage height, 1.15 ft (0.351 m) Sept. 16, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,960 ft^3/s (83.8 m^3/s) Oct. 28, gage height, 6.26 ft (1.908 m); minimum, 15 ft^3/s (0.42 m^3/s) Sept. 14, gage height, 1.34 ft (0.408 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	624	125	129	130	49	538	96	155	174	30	25
2	81	238	131	134	157	52	434	91	200	96	32	22
3	92	169	126	105	146	47	309	88	119	83	50	23
4	92	150	118	222	269	40	346	85	95	75	32	22
5	75	137	111	392	130	44	283	83	91	66	30	21
6	103	166	109	257	110	41	261	81	210	58	30	20
7	208	203	104	199	90	40	214	81	206	55	29	19
8	426	195	126	124	78	38	203	83	129	153	29	19
9	366	209	132	140	76	39	208	138	96	73	67	19
10	217	171	119	120	70	50	211	133	80	59	38	19
11	152	151	113	110	74	87	246	91	70	52	31	18
12	123	133	110	120	68	276	243	78	66	48	29	19
13	108	119	106	130	64	500	286	80	64	44	28	17
14	98	114	104	110	62	762	339	70	58	42	29	17
15	90	112	103	100	70	642	267	69	55	41	26	64
16	86	140	104	98	109	424	214	66	62	39	24	61
17	82	229	97	94	131	435	222	66	135	39	24	31
18	77	198	95	94	93	470	312	64	95	40	24	26
19	89	190	85	92	86	468	243	69	72	47	22	25
20	83	347	86	90	78	369	187	83	67	40	23	23
21	72	391	88	80	78	395	208	70	64	38	27	22
22	68	300	86	78	79	435	179	66	62	36	24	22
23	93	229	264	76	74	365	157	111	60	33	22	61
24	111	200	340	76	68	331	142	106	56	30	23	64
25	87	174	225	76	62	366	129	85	50	29	25	37
26	88	157	161	76	58	480	123	75	53	27	26	29
27	447	178	139	74	54	427	131	66	54	27	23	81
28	1610	165	135	72	52	262	119	66	48	38	22	63
29	1130	151	132	68	---	224	109	77	389	50	23	40
30	996	134	119	66	---	234	102	66	551	35	21	32
31	849	---	105	64	---	357	---	174	---	32	21	---
TOTAL	8270	6074	3998	3666	2616	8749	6965	2657	3512	1699	884	961
MEAN	267	202	129	118	93.4	282	232	85.7	117	54.8	28.5	32.0
MAX	1610	624	340	392	269	762	538	174	551	174	67	81
MIN	68	112	85	64	52	38	102	64	48	27	21	17

CAL YR 1981 TOTAL 43027 MEAN 118 MAX 1610 MIN 13
WTR YR 1982 TOTAL 50051 MEAN 137 MAX 1610 MIN 17

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY

LOCATION.--Lat 43°03'27", long 76°09'46", Onondaga County, Hydrologic Unit 04140201, on right bank 250 ft (76 m) upstream from bridge on Spencer Street in Syracuse, 1,000 ft (305 m) upstream from Erie (Barge) Canal terminal, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--110 mi² (285 km²).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. September 1970 to current year.

REVISED RECORDS.--WRD NY 1972: 1971(M). WRD NY 1975: 1972(M), 1974(M). WDR NY-81-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 362.29 ft (110.426 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. High flows regulated by Onondaga Reservoir (see station 04238500). Discharge includes minor diversion from Gate House Pond in headwaters of West Branch Tioughnioga River basin. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.75 ft (111.176 m).

AVERAGE DISCHARGE.--12 years, 203 ft³/s (5.749 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft³/s (77.6 m³/s) July 3, 1974, gage height, 8.73 ft (2.661 m); minimum, 21 ft³/s (0.59 m³/s) Oct. 24, 1981, gage height, 2.18 ft (0.64 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,670 ft³/s (75.6 m³/s) Oct. 28, gage height, 8.53 ft (2.600 m); minimum, 33 ft³/s (0.93 m³/s) Sept. 11, 12, gage height, 2.33 ft (0.710 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	670	216	221	162	93	573	135	209	264	72	51
2	105	359	219	208	191	99	482	131	232	169	70	49
3	114	286	211	177	208	93	371	124	158	149	88	51
4	118	258	204	351	309	80	390	118	133	137	67	48
5	101	239	194	446	247	104	335	112	160	127	64	47
6	138	253	191	335	194	94	311	116	291	118	61	44
7	258	297	184	275	142	98	266	120	250	146	58	42
8	432	272	211	172	144	93	264	131	174	214	70	42
9	389	280	216	201	131	89	266	179	142	137	122	41
10	264	242	199	160	110	96	264	178	122	116	69	40
11	194	216	191	142	100	177	294	140	114	108	59	34
12	161	199	191	146	110	362	291	124	106	104	58	34
13	145	179	184	155	110	606	323	127	104	94	58	37
14	136	172	182	150	108	804	375	116	98	93	58	59
15	125	169	179	150	122	693	320	108	94	91	57	102
16	117	206	182	140	155	506	277	102	106	89	55	89
17	114	286	172	130	182	587	286	102	204	89	54	51
18	110	258	172	130	146	562	347	100	146	102	54	41
19	117	253	153	130	142	566	294	149	116	98	52	40
20	115	476	151	130	133	475	245	116	108	94	58	40
21	103	465	151	120	135	506	255	102	106	88	55	38
22	96	393	160	110	137	541	234	98	124	83	51	40
23	123	329	384	110	129	465	211	140	100	81	51	179
24	150	289	429	110	122	419	196	140	94	76	51	91
25	121	261	323	110	106	445	179	114	91	73	75	58
26	137	239	255	110	104	544	172	102	100	72	52	47
27	592	269	234	110	104	499	177	93	91	70	51	149
28	1790	258	229	110	100	362	165	96	88	124	48	93
29	1090	239	221	100	---	320	153	100	495	100	47	64
30	986	221	209	100	---	329	144	89	566	81	47	58
31	862	---	191	104	---	442	---	216	---	76	47	---
TOTAL	9405	8533	6588	5143	4083	11149	8460	3818	4922	3463	1879	1799
MEAN	303	284	213	166	146	360	282	123	164	112	60.6	60.0
MAX	1790	670	429	446	309	804	573	216	566	264	122	179
MIN	96	169	151	100	100	80	144	89	88	70	47	34

CAL YR 1981 TOTAL 60257 MEAN 165 MAX 1790 MIN 26
WTR YR 1982 TOTAL 69242 MEAN 190 MAX 1790 MIN 34

04240100 HARBOR BROOK AT SYRACUSE, NY

LOCATION.--Lat 43°02'09", long 76°10'55", Onondaga County, Hydrologic Unit 04140201, on left bank 120 ft (36.6 m) upstream from bridge on Holden Street at Syracuse, and 2.6 mi (4.2 km) upstream from mouth.

DRAINAGE AREA.--10.0 mi² (25.9 km²)

PERIOD OF RECORD.--June 1959 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 391.16 ft (119.226 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1978, at site 1,660 ft (506 m) upstream and Oct. 1, 1978 to May 31, 1980, at site 1,800 ft (549 m) upstream at datum 3.63 ft (1.106 m) higher.

REMARKS.--Records poor. Flow includes some sewage and storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--23 years, 9.06 ft³/s (0.257 m³/s) 12.30 in/yr (312 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 726 ft³/s (20.6 m³/s) July 3, 1974, gage height, 8.34 ft (2.542 m) datum then in use, from rating curve extended above 180 ft³/s (5.10 m³/s) on basis of slope-area measurements of peak flow; minimum, 0.11 ft³/s (0.003 m³/s), gage height, 0.77 ft (0.235 m) Aug. 8, 1980, result of regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 300 ft³/s (8.50 m³/s) Oct. 28 at 1030 hours, gage height, 7.37 ft (2.246 m), no other peak above base of 150 ft³/s (4.248 m³/s); minimum daily, 2.7 ft³/s (0.08 m³/s) August 16-18.

REVISIONS.--The maximum discharge for the water year 1981 has been revised to 178 ft³/s (5.041 m³/s) Feb. 11, 1981, gage height, 4.57 ft (1.393 m), superseding figure published in the report for 1981.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	11	8.8	10	6.6	5.5	24	6.8	6.6	4.2	2.9	3.7
2	4.1	9.6	8.6	8.6	5.8	5.5	16	6.6	8.1	3.8	3.2	3.8
3	4.1	8.6	8.4	8.4	7.7	4.9	15	6.4	5.5	3.8	3.1	3.8
4	3.8	7.9	8.1	40	7.4	4.7	14	6.2	5.1	3.8	3.2	3.5
5	3.9	7.4	7.9	20	6.8	5.5	13	6.4	6.0	3.8	3.2	3.7
6	5.4	7.0	7.7	12	6.4	4.9	12	6.4	17	4.0	3.2	4.2
7	6.4	8.4	7.4	13	6.0	5.1	11	6.2	8.1	6.2	3.2	3.4
8	8.1	6.8	7.2	10	6.0	4.7	11	7.0	6.4	4.3	3.5	3.2
9	5.6	7.0	7.2	9.1	6.0	4.7	11	7.0	6.2	4.0	4.9	3.2
10	4.6	6.8	7.2	8.4	5.8	4.7	13	6.2	5.8	4.0	3.2	3.2
11	4.4	6.6	7.2	7.7	5.6	11	15	6.4	5.5	4.0	2.9	3.2
12	4.4	6.4	7.0	7.4	5.6	12	14	6.2	5.5	4.0	2.9	3.4
13	4.1	6.0	7.0	7.7	5.6	68	20	6.0	5.3	4.3	2.9	3.5
14	4.1	5.8	7.0	7.2	5.6	38	15	5.3	5.3	4.5	2.8	4.2
15	4.1	6.0	7.0	7.0	6.6	25	12	5.1	5.3	4.7	2.8	6.4
16	4.4	7.9	6.8	7.0	7.2	20	11	5.1	5.4	4.9	2.7	3.4
17	4.4	7.4	6.8	6.8	6.0	63	12	5.3	9.1	4.7	2.7	2.9
18	5.0	6.8	6.8	6.8	6.2	32	11	5.1	5.3	5.5	2.7	2.8
19	4.8	6.4	6.8	6.6	6.2	28	10	9.4	5.3	3.4	2.9	2.8
20	4.6	32	6.6	6.6	6.0	24	10	6.0	4.9	3.7	4.0	2.8
21	4.6	14	6.2	6.4	6.2	33	9.4	5.5	4.9	3.2	2.9	2.9
22	4.6	14	6.6	6.0	5.8	27	8.4	6.4	5.1	3.4	2.9	3.2
23	5.6	12	22	6.0	5.5	22	8.4	7.2	4.9	3.7	2.9	9.9
24	4.8	11	14	6.0	5.3	23	8.4	6.0	4.5	3.8	3.4	4.0
25	4.4	9.9	11	6.0	5.5	22	8.1	5.5	4.3	4.0	4.7	3.4
26	8.1	8.8	9.6	6.0	5.5	25	8.1	4.9	5.3	4.0	3.1	3.2
27	82	13	9.4	5.8	5.5	18	7.9	4.9	3.8	3.8	3.4	9.9
28	223	11	8.6	5.8	5.5	16	7.4	5.5	3.7	8.1	3.4	4.3
29	23	9.9	8.8	5.8	---	16	7.4	4.9	14	3.5	3.4	4.0
30	15	8.6	8.4	5.8	---	16	7.0	4.7	6.2	3.2	3.5	3.7
31	12	---	8.4	5.8	---	25	---	9.9	---	3.1	3.5	---
TOTAL	481.3	284.0	260.5	275.7	169.9	614.2	350.5	190.5	188.4	129.4	100.0	119.6
MEAN	15.5	9.47	8.40	8.89	6.07	19.8	11.7	6.15	6.28	4.17	3.23	3.99
MAX	223	32	22	40	7.7	68	24	9.9	17	8.1	4.9	9.9
MIN	3.8	5.8	6.2	5.8	5.3	4.7	7.0	4.7	3.7	3.1	2.7	2.8
CFSM	1.55	.95	.84	.89	.61	1.98	1.17	.62	.63	.42	.32	.40
IN.	1.79	1.06	.97	1.03	.63	2.28	1.30	.71	.70	.48	.37	.44

CAL YR 1981 TOTAL 2669.3 MEAN 7.31 MAX 223 MIN 2.5 CFSM .73 IN 9.93
WTR YR 1982 TOTAL 3164.0 MEAN 8.67 MAX 223 MIN 2.7 CFSM .87 IN 11.77

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY

LOCATION.--Lat 43°03'22", long 76°11'07", Onondaga County, Hydrologic Unit 04140201, on left bank 250 ft (76 m) downstream from culvert on Hiawatha Boulevard, in Syracuse, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--11.3 mi^2 (29.3 km^2).

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. October 1970 to current year.

REVISED RECORDS.--WDR NY-76-1: 1971-75 (P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 365.86 ft (111.514 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow includes some sewage and storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--12 years, 15.4 ft^3/s (0.436 m^3/s), 18.51 in/yr (470 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft^3/s (23.3 m^3/s) July 3, 1974, gage height, 7.91 ft (2.411 m), from rating curve extended above 160 ft^3/s (4.53 m^3/s) on basis of step-backwater computations; maximum gage height, 8.15 ft (2.484 m) Sept. 26, 1975 (backwater from Onondaga Lake); minimum discharge, 1.0 ft^3/s (0.028 m^3/s) June 25, 1971; minimum gage height, 0.34 ft (0.104 m) Sept. 20, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 290 ft^3/s (8.21 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1130	*407	11.5	*5.76	1.756	Aug. 9	1630	291	8.24	5.02	1.530

Minimum discharge, 2.1 ft^3/s (0.06 m^3/s) Sept. 4, 5, 6, 9, gage height, 1.73 ft (0.527 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	12	10	12	8.6	6.1	30	8.3	7.5	4.5	3.0	2.6
2	5.9	10	9.3	10	6.5	6.1	18	8.3	8.5	4.3	4.5	2.9
3	7.3	9.0	8.8	20	11	5.5	18	8.3	5.9	4.2	3.0	2.7
4	3.5	8.6	8.3	40	8.6	5.5	17	6.7	5.7	4.0	3.0	2.3
5	3.4	8.1	8.3	24	7.1	7.6	16	6.7	7.6	3.9	3.0	2.3
6	8.3	8.6	7.8	14	6.7	6.1	15	6.7	27	4.1	2.9	2.6
7	11	10	7.6	14	6.3	6.1	13	6.9	8.6	10	3.0	2.5
8	8.8	7.6	11	11	6.3	5.5	13	9.5	6.3	4.4	5.8	2.3
9	5.5	7.6	8.6	10	6.3	5.5	13	9.0	5.5	3.8	15	2.4
10	4.2	7.1	8.1	9.5	6.1	5.5	15	6.7	5.3	3.7	3.3	2.4
11	3.9	6.7	8.1	9.0	5.9	20	18	6.9	5.0	3.7	2.9	2.4
12	3.9	6.5	7.8	8.6	5.7	16	17	6.9	5.0	3.7	3.0	2.5
13	3.8	6.3	7.6	8.6	5.9	60	25	6.7	4.8	3.5	3.0	2.7
14	3.6	7.1	7.6	8.1	5.9	48	18	6.5	4.8	3.4	2.9	4.2
15	3.8	9.0	7.6	7.8	8.6	32	14	6.5	5.0	3.4	2.7	7.0
16	3.8	11	7.3	7.8	9.5	26	12	6.5	7.2	3.5	2.7	5.0
17	3.6	7.6	7.3	7.3	6.7	69	16	7.2	15	3.5	2.7	4.0
18	5.0	7.6	7.6	7.8	7.1	41	12	6.8	5.4	8.6	2.6	3.2
19	3.9	6.5	7.3	7.1	7.3	36	11	13	5.2	3.5	2.6	3.2
20	3.6	38	7.3	6.9	7.1	31	11	8.0	4.8	4.5	3.9	3.3
21	3.8	18	7.1	6.7	7.8	41	11	6.3	5.1	3.3	2.5	3.6
22	3.8	18	7.3	6.5	7.3	34	9.5	7.3	8.6	3.2	2.5	5.0
23	6.5	14	33	7.1	6.7	28	8.8	9.0	5.2	3.2	2.5	12
24	4.2	12	16	6.7	6.1	29	8.6	7.5	4.5	3.1	2.5	6.0
25	4.1	11	12	6.5	6.1	26	8.1	6.5	4.5	3.1	7.3	4.5
26	10	10	10	6.5	5.9	30	8.6	5.8	7.2	3.1	2.5	4.0
27	96	16	10	6.5	6.3	21	7.8	5.6	4.5	3.1	3.1	12
28	282	15	9.8	6.5	6.1	18	7.6	7.6	4.4	19	2.6	6.0
29	32	11	10	6.3	---	17	8.8	6.8	27	3.4	2.5	5.0
30	18	9.5	9.8	6.9	---	19	8.3	6.0	7.0	3.4	2.6	3.8
31	14	---	10	6.9	---	36	---	15	---	3.1	2.5	---
TOTAL	576.5	329.4	298.3	316.6	195.5	737.5	409.1	235.5	228.1	139.2	108.6	124.4
MEAN	18.6	11.0	9.62	10.2	6.98	23.8	13.6	7.60	7.60	4.49	3.50	4.15
MAX	282	38	33	40	11	69	30	15	27	19	15	12
MIN	3.4	6.3	7.1	6.3	5.7	5.5	7.6	5.6	4.4	3.1	2.5	2.3
CFSM	1.65	.97	.85	.90	.62	2.11	1.20	.67	.67	.40	.31	.37
IN.	1.90	1.08	.98	1.04	.64	2.43	1.35	.78	.75	.46	.36	.41

CAL YR 1981 TOTAL 3109.6 MEAN 8.52 MAX 282 MIN 2.5 CFSM .75 IN 10.24
WTR YR 1982 TOTAL 3698.7 MEAN 10.1 MAX 282 MIN 2.3 CFSM .89 IN 12.18

04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY

LOCATION.--Lat 43°04'38", long 76°10'14", Onondaga County, Hydrologic Unit 04140201, on left bank 0.2 mi (0.3 km) upstream from bridge on Park Street, and 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--29.9 mi² (77.4 km²).

PERIOD OF RECORD.--Occasional measurements water years 1959-72. December 1972 to current year.

REVISED RECORDS.--WDR NY 76-1: 1975 (M).

GAGE.--Water-stage recorder. Datum of gage is 362.76 ft (110.569 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1978, at same site at datum 0.08 ft (0.024 m) higher.

REMARKS.--Records poor. Temporary channel storage intermittently results from backwater caused by Onondaga Lake.

AVERAGE DISCHARGE.--9 years (water years 1974-82), 45.9 ft³/s (1.300 m³/s), 20.85 in/yr (530 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft³/s (37.1 m³/s) Sept. 26, 1975, gage height, 6.17 ft (1.881 m), from rating curve extended above 530 ft³/s (15.0 m³/s); minimum daily, 1.9 ft³/s (0.054 m³/s) Feb. 6, 7, 1977; minimum gage height, 0.28 ft (0.085 m) Feb. 6-8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	0830	*1,210	34.3	*5.83	1.777	Mar. 17	1400	511	14.5	2.72	0.829

Minimum daily discharge, 5.9 ft³/s (0.167 m³/s) Sept. 6, 20; minimum gage height, 0.46 ft (0.140 m) Sept. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	200	42	42	27	23	66	25	32	51	7.5	13
2	19	181	45	43	24	24	32	24	115	29	12	7.2
3	32	134	35	28	37	21	30	23	42	23	13	10
4	23	102	33	120	52	20	65	22	32	21	8.8	6.6
5	19	80	30	105	36	32	38	21	30	17	8.5	6.1
6	44	84	36	71	32	27	36	21	148	15	7.8	5.9
7	59	99	29	56	27	27	57	21	96	25	7.8	6.1
8	122	68	30	41	26	25	50	21	48	88	10	6.1
9	102	70	38	34	26	22	50	22	34	25	43	6.3
10	62	55	40	25	24	22	52	23	31	20	29	6.3
11	41	46	36	23	22	70	56	19	22	17	9.5	6.6
12	39	39	36	22	21	109	58	19	18	16	8.2	6.6
13	30	10	34	20	19	212	64	19	18	17	9.2	6.9
14	24	14	32	19	19	229	90	17	18	16	12	7.8
15	23	25	32	16	31	195	78	17	17	16	8.2	40
16	22	37	32	16	52	150	60	16	24	16	7.5	11
17	21	39	31	15	46	440	60	16	67	15	7.5	7.8
18	21	46	30	15	37	209	84	16	27	42	7.8	6.9
19	24	28	28	15	39	171	70	28	21	44	7.5	6.1
20	22	149	23	15	37	120	54	40	24	21	8.2	5.9
21	21	99	22	15	39	135	50	22	22	13	8.5	6.1
22	20	97	21	15	39	145	42	21	24	10	7.5	6.6
23	36	73	119	15	39	71	39	58	54	9.9	7.2	155
24	32	48	93	15	34	44	37	53	24	9.5	7.2	46
25	26	29	72	15	29	40	32	34	19	8.8	22	13
26	46	28	58	15	25	62	30	26	26	8.2	8.8	8.8
27	239	63	47	15	23	53	32	22	21	7.5	7.2	90
28	748	49	41	14	24	32	30	22	18	43	7.2	23
29	474	36	39	14	---	19	27	28	153	27	6.3	12
30	351	31	33	14	---	22	26	23	88	9.5	6.3	9.2
31	239	---	27	20	---	30	---	37	---	7.8	12	---
TOTAL	2998	2059	1244	908	886	2801	1495	776	1313	688.2	333.2	548.9
MEAN	96.7	68.6	40.1	29.3	31.6	90.4	49.8	25.0	43.8	22.2	10.7	18.3
MAX	748	200	119	120	52	440	90	58	153	88	43	155
MIN	17	10	21	14	19	19	26	16	17	7.5	6.3	5.9
CFSM	3.23	2.29	1.34	.98	1.06	3.02	1.67	.84	1.47	.74	.36	.61
IN.	3.73	2.56	1.55	1.13	1.10	3.48	1.86	.97	1.63	.86	.41	.68

CAL YR 1981 TOTAL 13807.0 MEAN 37.8 MAX 748 MIN 6.1 CFSM 1.26 IN 17.18
WTR YR 1982 TOTAL 16050.3 MEAN 44.0 MAX 748 MIN 5.9 CFSM 1.47 IN 19.97

04240145 SPAFFORD CREEK AT BROMLEY ROAD, NEAR SPAFFORD, NY

LOCATION.--Lat 42°47'15", Long 76°11'49", Onondaga County, Hydrologic Unit 04140201, on right bank just upstream from culvert on Bromley Road, 0.4 mi (0.6 km) west of intersection with Otisco Valley Road, 3.6 mi (5.8 km) southeast of Spafford, and 4.2 mi (6.8 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3.14 mi^2 (8.13 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 1,020 ft (311 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during the period March to September, 128 ft^3/s (3.62 m^3/s) July 7, gage height, 4.14 ft (1.262 m); flood of Oct. 28, 1981 was considerably higher, discharge not determined; minimum daily discharge, 1.2 ft^3/s (0.03 m^3/s) Jan. 26, 27; minimum gage height, 1.90 ft (0.579 m) many days.

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (cfs)
Sept. 22, 1981	14

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						3.6	35	6.9	6.2	6.2	2.9	2.5
2						4.0	18	6.5	8.0	5.9	3.1	2.3
3						3.6	21	6.5	6.2	5.6	2.9	2.6
4						3.6	16	6.5	6.5	5.3	2.8	2.3
5						4.0	14	6.2	8.0	5.0	2.8	2.3
6						3.6	12	6.2	17	4.7	2.8	2.2
7						4.0	11	6.2	9.2	12	2.6	2.2
8						3.6	9.6	6.9	8.0	7.0	5.9	2.2
9						3.6	9.2	8.0	6.9	4.7	3.9	2.2
10						3.4	9.6	6.2	6.2	4.5	2.9	2.2
11						5.4	9.2	5.9	5.6	4.3	2.8	2.0
12						6.8	9.2	5.9	5.3	4.1	2.8	2.0
13						15	12	5.6	5.0	3.9	2.8	2.0
14						11	10	5.6	4.7	3.7	2.8	2.0
15			† 5.5			8.6	11	5.6	4.4	3.5	2.6	2.8
16						8.0	12	5.6	5.3	3.5	2.6	2.2
17					† 4.6	11	20	5.3	8.0	3.9	2.8	2.2
18						11	19	5.3	4.7	3.7	2.6	2.2
19						11	14	6.2	4.4	3.5	2.6	2.0
20						11	12	5.6	4.4	3.7	2.9	2.0
21						15	13	5.3	5.0	3.3	2.6	1.9
22						12	10	5.9	4.1	3.1	2.5	2.0
23						13	9.6	6.5	3.9	3.1	2.5	5.9
24					† 4.2	15	9.2	5.6	3.9	2.9	2.5	2.6
25						19	8.4	5.0	3.6	2.9	3.7	2.2
26						28	8.4	5.0	3.9	2.9	2.6	2.2
27						16	8.4	4.7	3.9	2.9	2.5	5.9
28	† 106					12	7.6	5.6	4.1	5.7	2.5	2.6
29						12	7.2	5.0	22	3.5	2.5	2.5
30						12	6.9	4.7	6.9	2.9	2.5	2.3
31						32	---	13	---	3.1	2.9	---
TOTAL						321.8	372.5	189.0	195.3	135.0	89.2	74.5
MEAN						10.4	12.4	6.10	6.51	4.35	2.88	2.48
MAX						32	35	13	22	12	5.9	5.9
MIN						3.4	6.9	4.7	3.6	2.9	2.5	1.9
CFSM						3.31	3.95	1.94	2.07	1.39	.92	.79
IN.						3.81	4.41	2.24	2.31	1.60	1.06	.88

† Result of discharge measurement.

04240145 SPAFFORD CREEK AT BROMLEY ROAD, NEAR SPAFFORD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1981 to September 1982.
NUTRIENT DATA: 1982 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March to September 1982.

REMARKS.--Samples analyzed by the Onondaga County Department of Drainage and Sanitation are designated by the value 83631 for agency analyzing sample code. Suspended sediment analyses done by U.S. Geological Survey Ohio District laboratory.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean during the period March to September, 314 mg/L Sept. 23; minimum daily mean, 1 mg/L July 25-27, Sept. 25,26.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily during the period March to September, 24 tons (22 Mg) July 7; minimum daily, 0.00 tons (0.00 Mg) many days.

WATER-QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
SEP							
22	0900	83631	14	73	2.8	.40	1.30
OCT							
28...	0930	83631	106	598	171	.92	<.100
DEC							
15...	0930	83631	5.5	12	.18	1.6	<.100
FEB							
17...	1030	83631	4.6	6	.07	.27	<.100
MAR							
03...	1215	83631	3.5	1	.01	1.5	<.100
10...	0900	83631	3.6	3	.03	1.4	<.100
12...	1100	83631	5.7	14	.22	1.2	.200
13...	0830	83631	6.7	51	.92	1.1	<.100
14...	1220	83631	7.4	26	.52	1.1	<.100
16...	1120	83631	7.3	5	.10	.04	<.100
17...	0920	83631	11	19	.56	.93	<.100
17...	1330	83631	11	54	1.6	.40	<.100
24...	0930	83631	10	12	.32	1.2	<.100
24...	0940	83631	--	--	--	1.2	<.100
APR							
08...	0830	83631	8.9	19	.46	1.6	<.100
14...	0815	83631	10	25	.67	1.7	.210
20...	0800	83631	11	24	.71	1.6	<.100
MAY							
05...	0830	83631	6.2	3	.05	2.6	<.100
19...	0830	83631	5.4	3	.04	2.1	.200
JUN							
03...	0800	83631	6.2	9	.15	1.4	.200
06...	1100	83631	11	43	1.3	.85	<.100
16...	0815	80010	--	--	--	1.5	.040
16...	0817	83631	3.9	8	.08	1.4	<.100
16...	0820	80010	--	--	--	1.5	.040
16...	0822	83631	--	--	--	1.4	<.100
16...	0825	80010	--	--	--	1.6	.030
16...	0827	83631	--	--	--	1.4	<.100
16...	0830	80010	--	--	--	1.5	.050
16...	0832	83631	--	--	--	1.4	<.100
17...	0845	83631	8.4	55	1.2	.55	<.100
29...	0805	83631	44	652	77	.45	.200
29...	0840	83631	51	587	81	.38	<.100
29...	1130	83631	31	311	26	.60	.100
29...	1415	83631	29	183	14	.58	<.100
29...	1750	83631	11	58	1.7	.80	<.100
30...	0745	83631	7.2	13	.25	.95	<.100
JUL							
13...	0815	83631	4.0	7	.08	1.4	.200
13...	0820	83631	--	--	--	1.4	.100
13...	1215	83631	5.9	11	.18	.90	<.100
28...	1025	83631	11	246	7.3	.85	.100
AUG							
11...	0830	83631	2.9	15	.12	1.5	.500
25...	0815	83631	3.6	18	.17	1.4	<.100
25...	0820	83631	--	--	--	1.5	<.100
SEP							
21...	0830	83631	2.2	6	.04	1.4	.200

04240145 SPAFFORD CREEK AT BROMLEY ROAD, NEAR SPAFFORD, NY--Continued

WATER-QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	PHOSPHORUS, ORGANIC DISSOLVED (MG/L AS P)
SEP						
22	1.30	.200	--	.150	--	.01
OCT						
28...	1.60	.340	.322	.298	.31	.01
DEC						
15...	1.00	.060	.055	.013	.06	<.00
FEB						
17...	.60	.050	.050	.025	.04	.02
MAR						
03...	.20	.050	.040	.005	.03	.02
10...	.30	.060	.055	.045	.05	.01
12...	.40	.080	.060	.020	.05	.01
13...	.40	.080	.050	.032	.05	.00
14...	.80	.095	.075	.058	.07	.01
16...	.40	.090	.060	.035	.04	.02
17...	.50	.080	.070	.035	.05	.02
17...	.60	.110	.080	.060	.06	.02
24...	.40	.050	.025	.005	.02	.01
24...	.40	.060	.025	.015	.02	.01
APR						
08...	.30	.065	.060	.003	.06	.01
14...	.80	.040	.030	.010	.03	.01
20...	.40	.070	.030	.010	.03	.00
MAY						
05...	.40	.070	.040	.015	.03	.01
19...	.60	.060	.035	.010	.03	.01
JUN						
03...	.60	.050	.048	.010	.05	.00
06...	.60	.100	.035	.013	.02	.02
16...	.40	<.010	.010	<.010	.01	.00
16...	1.20	.050	.030	.010	.03	.01
16...	.40	.010	<.010	<.010	<.01	--
16...	.80	.050	.030	.010	.02	.01
16...	.20	<.010	<.010	<.010	<.01	--
16...	1.20	.050	.035	.010	.02	.02
16...	.40	<.010	<.010	<.010	<.01	--
16...	1.00	.050	.035	.010	.03	.01
17...	.80	.155	.040	.015	.04	<.01
29...	3.60	.720	.040	.010	.04	<.01
29...	2.50	.650	.040	.010	.04	<.01
29...	1.20	.280	.050	.015	.05	.01
29...	1.10	.190	.050	.025	.05	.01
29...	.80	.090	.050	.020	.05	.01
30...	.60	.055	.030	.030	.03	<.01
JUL						
13...	.20	.080	.030	.010	.02	.02
13...	.20	.070	.025	.015	.02	.01
13...	.80	.080	.050	.025	.03	.02
28...	1.20	.150	.075	.017	.05	.03
AUG						
11...	.60	.068	.040	.020	.04	<.01
25...	.40	.070	.055	.043	.06	<.01
25...	.80	.078	.050	.010	.05	<.01
SEP						
21...	.20	.060	.055	.015	.05	.01

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
JUN							
29...	0805	44	652	77	16	29	44
29...	0840	51	587	81	19	32	45

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
JUN							
29...	61	76	86	93	97	99	100
29...	62	75	85	92	96	99	100

04240145 SPAFFORD CREEK AT BROMLEY ROAD, NEAR SPAFFORD, NY--Continued

SUSPENDED-SEDIMENT, MARCH TO SEPTEMBER 1982

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											6	.06
2											8	.09
3											6	.06
4											6	.06
5											8	.09
6											6	.06
7											8	.09
8											6	.06
9											4	.04
10											3	.03
11											5	.07
12											13	.24
13											49	2.0
14											30	.49
15											14	.33
16											10	.21
17											31	.93
18											20	.67
19											13	.39
20											21	.72
21											27	.69
22											15	.49
23											27	1.1
24											32	1.8
25											36	2.1
26											42	3.4
27											32	1.4
28											18	.58
29											17	.56
30											16	.60
31											39	4.1
TOTAL											---	23.51

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	34	3.2	9	.17	13	.22	7	.12	2	.02	4	.03
2	24	1.2	5	.09	27	.76	6	.10	4	.03	4	.02
3	68	4.7	4	.07	9	.15	6	.09	6	.05	5	.04
4	37	1.6	4	.07	8	.14	6	.09	6	.05	4	.02
5	21	.79	3	.05	15	.32	5	.07	7	.05	4	.02
6	20	.65	3	.05	57	2.8	5	.06	7	.05	4	.02
7	20	.59	3	.05	14	.35	156	24	8	.06	4	.02
8	19	.49	12	.27	12	.26	142	4.3	114	3.8	5	.03
9	18	.45	23	.56	12	.22	14	.18	23	.26	5	.03
10	29	.81	14	.23	11	.18	12	.15	15	.12	6	.04
11	25	.64	9	.14	10	.15	10	.12	14	.11	6	.03
12	19	.47	8	.13	10	.14	8	.09	12	.09	6	.03
13	43	1.6	8	.12	9	.12	7	.07	10	.08	6	.03
14	25	.69	7	.11	9	.11	6	.06	8	.06	7	.04
15	19	.56	7	.11	8	.10	6	.06	5	.04	24	.18
16	16	.52	6	.09	16	.21	5	.05	5	.04	7	.04
17	38	2.3	5	.07	43	1.4	9	.12	5	.04	4	.02
18	35	1.9	4	.06	9	.11	7	.07	5	.04	3	.02
19	27	1.0	12	.24	6	.07	6	.06	5	.04	2	.01
20	24	.78	10	.15	6	.07	6	.06	6	.05	3	.02
21	33	1.3	8	.11	8	.11	5	.04	6	.04	6	.03
22	17	.46	15	.26	6	.07	4	.03	4	.03	6	.03
23	15	.39	22	.44	6	.06	3	.03	4	.03	314	6.9
24	15	.37	6	.09	5	.05	2	.02	4	.03	4	.03
25	16	.36	5	.07	5	.05	1	.00	25	.30	1	.00
26	16	.36	5	.07	6	.06	1	.00	12	.08	1	.00
27	16	.36	4	.05	6	.06	1	.00	8	.05	225	7.2
28	15	.31	14	.25	10	.11	130	3.2	6	.04	13	.09
29	14	.27	10	.14	210	19	21	.21	5	.03	4	.03
30	13	.24	6	.08	14	.29	7	.05	4	.03	3	.02
31	---	---	114	9.5	---	---	4	.03	4	.03	---	---
TOTAL	---	29.36	---	13.89	---	27.74	---	33.53	---	5.77	---	15.02

04240150 SPAFFORD CREEK AT SAWMILL ROAD, NEAR SPAFFORD, NY

LOCATION.--Lat 42°49'33", Long 76°14'08", Onondaga County, Hydrologic Unit 04140201, on right bank just upstream from bridge on Sawmill Road, 0.2 mi (0.3 km) west of intersection with Otisco Valley Road, 1.0 mi (1.6 km) upstream from mouth, and 2.1 mi (3.4 km) northeast of Spafford. Water-quality sampling site at discharge station.

DRAINAGE AREA.--8.06 mi^2 (20.9 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1981 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (245 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during the period November to September, 192 ft^3/s (5.44 m^3/s) July 8, gage height, 5.10 ft (1.554 m); flood of Oct. 28, 1981 was considerably higher, discharge not determined; minimum daily discharge, 2.6 ft^3/s (0.03 m^3/s) Aug. 30, Sept. 7, 22; minimum gage height, 0.85 ft (0.259 m) Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		35	12	14	15	7.2	90	11	9.2	11	4.0	3.3
2		31	14	10	13	7.6	40	11	15	9.2	4.6	2.9
3		27	12	8.8	12	7.0	50	11	9.2	8.4	4.3	3.2
4		23	12	30	24	7.0	34	10	9.9	7.7	3.7	2.8
5		20	12	16	10	8.0	30	9.9	9.9	6.8	3.7	2.8
6		23	12	10	8.0	7.4	28	9.5	47	6.2	3.7	2.7
7		25	12	8.8	6.0	8.0	25	9.2	19	13	3.6	2.6
8		23	13	7.2	5.0	7.4	24	10	15	29	14	2.8
9		25	12	6.2	4.6	7.2	20	13	13	7.9	9.9	2.8
10		20	9.0	4.0	4.4	7.0	21	10	11	6.8	4.2	2.7
11		20	10	3.0	4.2	12	19	8.8	9.7	6.2	4.0	2.7
12		18	11	2.8	4.0	19	19	8.6	8.8	5.9	3.6	2.7
13		17	11	2.8	4.0	40	25	8.3	8.6	5.4	3.6	2.7
14		17	11	2.8	4.4	30	22	7.9	7.7	5.1	3.4	2.7
15		16	10	3.0	6.0	24	22	7.5	6.9	4.9	3.3	4.9
16		32	10	3.2	14	21	23	7.3	8.1	4.6	3.0	3.3
17		25	9.4	2.5	8.0	34	42	7.1	16	4.4	3.0	3.0
18		26	7.1	2.3	10	36	47	6.8	8.1	6.4	3.0	2.8
19		23	5.9	2.5	10	32	32	6.6	7.1	6.4	2.8	2.7
20		47	6.4	2.6	11	34	25	7.5	6.9	5.1	3.2	2.7
21		26	5.8	2.5	11	46	30	6.8	7.9	4.8	3.2	2.7
22		22	8.2	2.4	9.0	39	21	7.1	6.4	4.3	2.9	2.6
23		21	40	2.7	7.6	38	19	9.0	6.1	4.2	2.7	8.6
24		19	22	2.4	7.6	43	17	7.7	5.6	3.9	2.9	4.8
25		17	16	2.2	8.2	50	16	6.9	5.2	3.7	4.3	3.3
26		16	13	2.0	7.8	81	15	6.2	5.7	3.6	3.3	3.0
27		18	15	2.0	7.8	53	15	5.9	5.6	3.6	2.9	12
28		15	14	2.2	7.2	26	13	6.9	5.2	6.9	2.8	4.4
29		14	14	2.2	---	22	12	6.8	62	5.6	2.7	3.9
30		12	12	2.4	---	25	12	5.7	17	4.0	2.6	3.6
31		---	12	2.4	---	76	---	21	---	4.0	4.0	---
TOTAL		673	383.8	167.9	243.8	854.8	808	271.0	372.8	209.0	122.9	107.7
MEAN		22.4	12.4	5.42	8.71	27.6	26.9	8.74	12.4	6.74	3.96	3.59
MAX		47	40	30	24	81	90	21	62	29	14	12
MIN		12	5.8	2.0	4.0	7.0	12	5.7	5.2	3.6	2.6	2.6
CFSM		2.56	1.42	.62	.99	3.15	3.07	1.00	1.42	.77	.45	.41
IN.		2.86	1.63	.71	1.04	3.63	3.43	1.15	1.58	.89	.52	.46

04240150 SPAFFORD CREEK AT SAWMILL ROAD, NEAR SPAFFORD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1981 to September 1982.
NUTRIENT DATA: 1982 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: November 1981 to September 1982.

REMARKS.--Samples analyzed by the Onondaga County Department of Drainage and Sanitation are designated by the value 83631 for agency analyzing sample code. Suspended sediment analyses done by U.S. Geological Survey Ohio District laboratory.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean during the period November to September, 1280 mg/L July 28; minimum daily mean, 3 mg/L May 7.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 257 tons (233 Mg) Apr. 1; minimum daily, .04 tons (.04 Mg) Jan. 25-29.

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
SEP							
22	0930	83631	--	909	--	.91	.140
OCT							
28...	1030	83631	220	1120	662	.70	.100
DEC							
15...	1100	83631	10	6	.16	1.3	<.100
FEB							
17...	1030	83631	6.7	17	.31	.22	<.100
MAR							
02...	1120	83631	7.8	7	.15	.85	.170
10...	1300	83631	7.1	15	.29	1.1	<.100
12...	1215	83631	18	65	3.2	1.1	.500
13...	1300	83631	45	637	77	.70	.600
14...	1240	83631	26	245	17	.35	.300
16...	1125	83631	20	34	1.8	.35	.100
17...	1030	83631	35	120	11	.48	.100
17...	1345	83631	35	108	10	.28	<.100
24...	1400	83631	33	68	6.1	1.2	.300
24...	1410	83631	--	--	--	1.2	.100
APR							
08...	1345	83631	27	130	9.5	1.4	<.100
14...	1230	83631	22	36	2.1	1.3	<.100
20...	1115	80010	--	--	--	1.2	.040
20...	1117	83631	25	41	2.8	1.2	<.100
20...	1120	80010	--	--	--	1.2	--
20...	1122	83631	--	--	--	1.3	<.100
20...	1125	80010	--	--	--	1.2	.020
20...	1127	83631	--	--	--	1.3	<.100
20...	1130	80010	--	--	--	1.2	.040
20...	1132	83631	--	--	--	1.2	<.100
MAY							
05...	1230	83631	9.2	4	.10	1.6	<.100
19...	1240	83631	6.7	16	.29	1.5	<.100
JUN							
03...	1040	83631	9.7	22	.58	1.0	<.100
06...	0830	83631	42	250	28	2.3	.200
06...	1045	83631	31	171	14	2.4	<.100
16...	1145	83631	8.2	21	.46	.73	<.100
17...	0900	83631	33	497	44	.65	.200
17...	1030	83631	22	372	22	.60	<.100
29...	0830	83631	65	1200	210	1.2	.200
29...	0910	83631	101	1880	513	1.1	<.100
29...	0920	83631	122	1600	527	1.5	.100
29...	0940	83631	131	2290	809	1.3	.100
29...	1010	83631	149	2000	806	1.5	.100
29...	1040	83631	150	1860	753	1.8	<.100
29...	1110	83631	151	1310	534	1.7	<.100
29...	1150	83631	151	1200	446	1.7	.100
29...	1210	83631	153	961	397	2.0	<.100
29...	1310	83631	144	779	303	2.2	.100
29...	1615	83631	111	638	191	2.1	.200
29...	2015	83631	40	315	34	2.3	<.100
30...	1030	83631	17	57	2.6	1.9	<.100
JUL							
07...	2300	83631	82	1300	287	1.6	.300
07...	2400	83631	192	--	--	.75	.100
08...	0100	83631	196	5910	3130	.50	.200
08...	0300	83631	53	--	--	1.0	.200
13...	1220	83631	--	--	--	.90	<.100
28...	1105	83631	6.1	54	.89	.93	.100

04240150 SPAFFORD CREEK AT SAWMILL ROAD, NEAR SPAFFORD, NY--Continued

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
AUG							
11...	1230	80010	--	--	--	.79	.050
11...	1232	83631	3.9	29	.31	1.5	<.100
11...	1235	80010	--	--	--	.78	.040
11...	1237	83631	--	--	--	1.5	<.100
11...	1240	80010	--	--	--	.78	.030
11...	1242	83631	--	--	--	1.4	<.100
11...	1245	80010	--	--	--	.80	.040
11...	1247	83631	--	--	--	1.5	<.100
25...	1115	83631	3.4	40	.37	.95	<.100
25...	1120	83631	--	--	--	.95	<.100
SEP							
21...	1150	83631	13	--	--	.83	<.100

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	PHOSPHORUS, ORGANIC DISSOLVED (MG/L AS P)
SEP						
22	4.30	.600	--	.430	--	.03
OCT						
28...	2.60	.525	.510	.478	.49	.01
DEC						
15...	.80	.050	.050	.018	.05	<.00
FEB						
17...	.80	.065	.060	.030	.06	.01
MAR						
02...	.20	.060	.055	.020	.05	.01
10...	.50	.110	.105	.095	.10	.01
12...	.90	.150	.130	.095	.11	.02
13...	2.70	.540	.470	.410	.45	.02
14...	1.00	.225	.140	.125	.13	.01
16...	1.00	.150	.135	.048	.06	.08
17...	.80	.135	.110	.070	.10	.01
17...	.60	.140	.120	.098	.10	.02
24...	.40	.120	.050	.020	.05	.01
24...	.40	.100	.035	.020	.03	.01
APR						
08...	.40	.110	.065	.010	.04	.03
14...	.80	.050	.030	.005	.03	.01
20...	.15	.070	<.010	.020	<.01	--
20...	.60	.095	.055	.015	.03	.03
20...	--	--	<.010	<.010	<.01	--
20...	.60	.100	.065	.013	.02	.03
20...	.37	.020	.020	.010	.02	.00
20...	.60	.105	.060	.013	.03	.04
20...	.41	.030	<.010	<.010	<.01	--
20...	.60	.100	.060	.013	.02	.04
MAY						
05...	.60	.070	.060	.015	.03	.03
19...	.70	.070	.040	.008	.03	.01
JUN						
03...	.40	.050	.048	.008	.04	.01
06...	1.60	.250	.050	.023	.03	.02
06...	1.20	.250	.045	.015	.03	.02
16...	.80	.060	.035	.010	.03	.01
17...	2.20	.050	.040	.015	.04	<.01
17...	1.80	.045	.040	.015	.04	<.01
29...	4.80	1.00	.110	.030	.09	.02
29...	4.90	.860	.055	.015	.05	.01
29...	4.80	.580	.075	.030	.07	.01
29...	7.20	.173	.060	.015	.05	.01
29...	5.60	1.20	.090	.015	.07	.02
29...	4.60	.095	.090	.020	.07	.02
29...	3.10	.760	.090	.020	.09	.01
29...	4.20	.100	.090	.040	.09	<.01
29...	2.70	.640	.085	.015	.09	<.01
29...	2.60	.660	.075	.020	.07	.01
29...	2.20	.380	.055	.020	.06	<.01
29...	2.10	.325	.050	.015	.05	<.01
30...	.60	.080	.040	.010	.04	<.01
JUL						
07...	2.60	.850	.080	.035	.08	.01
07...	5.60	.130	.050	.035	.05	.01
08...	10.0	.350	.050	.035	.05	.01
08...	5.20	.270	.060	.035	.06	.01
13...	.80	.090	.040	.035	.04	.01
28...	1.00	.100	.065	.020	.06	.01

04240150 SPAFFORD CREEK AT SAWMILL ROAD, NEAR SPAFFORD, NY--Continued

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	PHOSPHORUS, ORGANIC DISSOLVED (MG/L AS P)
AUG						
11...	.40	.050	.020	.030	.02	.00
11...	.60	.110	.050	.018	.05	<.01
11...	.50	.040	.020	.030	.02	.00
11...	.80	.108	.055	.020	.05	.01
11...	.40	.050	.020	.030	.02	.00
11...	.80	.105	.055	.025	.05	.01
11...	.30	.050	.020	.030	.02	.00
11...	.60	.110	.055	.015	.05	.01
25...	.80	.130	.065	.010	.01	.01
25...	.80	.130	.060	.020	.06	.01
SEP						
21...	.20	.080	.065	.015	.06	.01

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR							
13...	1300	45	637	77	11	7	33
JUN							
06...	0830	42	250	28	28	41	58
17...	0900	33	497	44	29	46	65
17...	1000	22	372	22	31	50	69
29...	0910	101	1880	513	16	27	40
29...	0920	122	1600	527	18	29	42
29...	1040	150	1860	753	25	38	53
29...	1045	150	1860	753	25	38	53
29...	1110	151	1310	534	21	32	45

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
MAR						
13...	56	76	91	97	99	100
JUN						
06...	77	88	95	98	99	100
17...	86	94	98	99	100	--
17...	87	94	97	99	100	--
29...	57	75	89	94	99	100
29...	59	76	90	96	99	100
29...	69	82	91	95	99	100
29...	70	85	93	98	100	--
29...	59	71	82	96	99	100

04240150 SPAFFORD CREEK AT SAWMILL ROAD, NEAR SPAFFORD, NY--Continued

SUSPENDED-SEDIMENT, NOVEMBER 1981 TO SEPTEMBER 1982

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			243	23	62	2.0	77	2.9	81	3.3	30	.58
2			215	18	77	2.9	48	1.3	66	2.3	8	.16
3			178	13	62	2.0	40	.95	62	2.0	8	.15
4			148	9.2	62	2.0	210	17	154	10	15	.28
5			122	6.6	62	2.0	93	4.0	48	1.3	13	.28
6			148	9.2	62	2.0	48	1.3	36	.78	5	.10
7			163	11	62	2.0	40	.95	23	.37	6	.13
8			148	9.2	66	2.3	30	.58	18	.24	5	.10
9			163	11	62	2.0	25	.42	16	.20	6	.12
10			104	5.6	41	1.0	14	.15	15	.18	15	.28
11			104	5.6	48	1.3	10	.08	14	.16	29	2.3
12			105	5.1	54	1.6	9	.07	14	.15	75	3.8
13			98	4.5	54	1.6	9	.07	14	.15	377	82
14			98	4.5	54	1.6	9	.07	15	.18	337	48
15			92	4.0	6	.16	9	.07	23	.37	210	17
16			231	20	41	1.1	10	.09	77	2.9	65	3.7
17			163	11	33	.84	10	.07	17	.37	155	14
18			171	12	30	.58	9	.06	48	1.3	183	26
19			147	9.1	24	.38	8	.05	48	1.3	135	12
20			386	49	25	.43	9	.06	54	1.6	162	19
21			171	12	23	.36	9	.06	54	1.6	286	39
22			140	8.3	37	.82	8	.05	41	1.0	253	30
23			129	7.3	315	34	9	.07	33	.68	248	29
24			117	6.0	136	8.1	8	.05	33	.68	255	38
25			96	4.4	93	4.0	7	.04	36	.80	322	47
26			93	4.0	68	2.4	7	.04	35	.74	429	104
27			105	5.1	81	3.3	7	.04	35	.74	461	66
28			84	3.4	77	2.9	7	.04	30	.58	171	12
29			77	2.9	77	2.9	7	.04	---	---	135	8.0
30			62	2.0	62	2.0	8	.05	---	---	163	11
31			---	---	62	2.0	8	.05	---	---	731	150
TOTAL			---	296.0	---	92.57	---	30.77	---	35.97	---	763.98

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	926	225	11	.33	165	4.1	15	.45	14	.15	13	.12
2	315	34	9	.27	139	8.3	11	.27	19	.29	11	.09
3	415	56	8	.24	22	.55	10	.23	14	.16	20	.17
4	251	23	6	.16	40	1.1	9	.19	11	.11	20	.15
5	210	17	5	.13	40	1.1	9	.17	11	.11	16	.12
6	185	14	4	.10	273	53	8	.13	11	.11	16	.12
7	163	11	3	.07	60	3.1	163	40	11	.11	17	.12
8	154	10	7	.19	35	1.4	1280	257	23	2.3	16	.12
9	122	6.6	14	.55	35	1.2	200	4.3	42	1.1	16	.12
10	129	7.3	9	.24	30	.89	35	.65	29	.33	16	.12
11	117	6.0	7	.17	28	.73	19	.32	28	.30	15	.11
12	117	6.0	6	.14	25	.59	17	.27	23	.22	15	.11
13	163	11	6	.13	20	.46	15	.22	16	.16	14	.10
14	135	8.0	6	.13	20	.42	13	.18	11	.10	14	.10
15	135	8.0	6	.12	25	.47	11	.15	9	.08	35	.53
16	146	9.1	6	.12	40	.87	11	.14	9	.07	15	.13
17	192	31	7	.13	252	23	10	.12	9	.07	10	.08
18	220	28	10	.18	105	2.3	19	.33	10	.08	9	.07
19	95	8.2	19	.34	50	.96	15	.26	10	.08	7	.05
20	40	2.7	14	.28	18	.34	11	.15	11	.10	8	.06
21	142	14	11	.20	40	.85	10	.13	11	.10	11	.08
22	35	2.0	13	.25	24	.41	11	.13	10	.08	12	.08
23	22	1.1	21	.58	15	.25	10	.11	11	.08	220	7.6
24	21	.96	15	.31	13	.20	9	.09	10	.08	95	1.2
25	21	.91	11	.20	12	.17	8	.08	28	.46	40	.36
26	20	.81	10	.17	15	.23	9	.09	14	.12	40	.32
27	22	.89	10	.16	11	.17	9	.09	11	.09	179	10
28	20	.70	13	.26	12	.17	48	1.4	10	.08	50	.59
29	15	.49	14	.26	617	159	17	.26	9	.07	20	.21
30	13	.42	9	.14	53	2.4	14	.15	8	.06	20	.19
31	---	---	245	25	---	---	13	.14	16	.23	---	---
TOTAL	---	544.18	---	31.55	---	268.73	---	308.20	---	7.48	---	23.22

0424015305 RICE BROOK AT RICE GROVE, NY

LOCATION.--Lat 42°51'07", Long 76°15'33", Onondaga County, Hydrologic Unit 04140201, on right bank just upstream from culvert on Otisco Valley Road, 0.1 mi (0.2 km) upstream from mouth at Rice Grove, and 0.2 mi (0.3 km) north of intersection with Otisco Valley Road. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2.44 mi^2 (6.32 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (244 m), from topographic map.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during the period April to September, 97 ft^3/s (2.75 m^3/s) June 29, gage height, 2.69 ft (0.818 m); flood of Oct. 28, 1981 was considerably higher, discharge not determined; minimum, 0.22 ft^3/s (0.01 m^3/s) Sept. 13, 14, gage height, 1.54 ft (0.469 m).

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (cfs)
Sept. 22, 1981	9.8

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							15	3.1	2.6	4.8	.63	.44
2							9.8	2.6	7.8	4.4	1.4	.44
3							11	2.1	2.3	3.4	1.4	.50
4							8.0	1.9	2.3	2.8	.78	.44
5							6.2	1.6	2.8	2.1	.70	.44
6							6.2	1.4	12	1.6	.63	.39
7							5.8	1.3	4.8	4.5	.56	.39
8							5.4	1.8	3.7	9.1	.78	.35
9						† .92	5.4	2.8	2.3	2.1	1.3	.35
10							5.8	2.1	2.1	1.8	.87	.35
11							6.6	1.6	1.9	1.4	.63	.30
12							6.6	1.4	1.8	1.2	.56	.26
13							12	1.3	1.6	1.1	.50	.26
14							8.4	1.2	1.6	1.1	.56	.30
15							6.6	1.1	1.8	.96	.50	.87
16						† 6.8	5.2	.96	1.8	.87	.44	.78
17			† 2.7			† 14	5.6	.87	4.4	.78	.39	.50
18					† 2.0		5.2	.70	1.9	.87	.39	.44
19							4.4	.70	1.8	1.1	.39	.44
20							4.0	.70	1.6	.96	.50	.44
21							5.6	.70	2.1	.78	.56	.44
22							4.0	.70	1.8	.70	.44	.44
23							3.7	1.4	1.6	.70	.39	3.4
24					† 1.6		3.7	1.8	1.3	.63	.44	1.8
25							3.7	1.6	1.2	.56	.70	.78
26							3.4	1.4	1.1	.50	.63	.56
27							3.4	1.2	.96	.50	.50	3.7
28	† 37						3.4	1.2	.70	.96	.44	1.3
29							3.1	1.3	37	1.2	.39	.87
30							3.1	1.3	8.4	.78	.39	.78
31							---	6.1	---	.63	.44	---
TOTAL							180.3	49.93	119.06	54.88	19.23	22.75
MEAN							6.01	1.61	3.97	1.77	.62	.76
MAX							15	6.1	37	9.1	1.4	3.7
MIN							3.1	.70	.70	.50	.39	.26
CFSM							2.46	.66	1.63	.73	.25	.31
IN.							2.75	.76	1.81	.84	.29	.35

† Result of discharge measurement.

0424015305 RICE BROOK AT RICE GROVE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1981 to September 1982.
NUTRIENT DATA: 1982 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: April to September 1982.

REMARKS.--Samples analyzed by the Onondaga County Department of Drainage and Sanitation are designated by the value 83631 for agency analyzing sample code. Suspended sediment analyses done by U.S. Geological Survey Ohio District laboratory.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean during the period April to September, 492 mg/L June 29; minimum daily mean, 1 mg/L many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily during the period April to September, 97 tons (88 Mg) June 29; minimum daily, 0.00 tons (0.00 Mg) many days.

WATER-QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
SEP							
22	1230	83631	9.8	32	.85	2.4	.100
OCT							
28...	1400	83631	37	127	13	1.8	.300
DEC							
15...	1500	83631	2.7	4	.03	2.6	.100
FEB							
18...	0900	83631	2.0	3	.02	.48	.110
MAR							
10...	1230	83631	.90	6	.01	1.8	<.100
12...	1730	83631	7.0	44	.83	1.9	1.00
13...	1130	83631	40	517	56	1.4	1.90
14...	1300	83631	27	233	17	1.6	.500
16...	1330	83631	6.8	7	.13	.65	.300
17...	1050	83631	14	60	2.3	1.9	.400
17...	1440	83631	14	55	2.1	1.8	.400
24...	1330	83631	8.6	42	.98	2.1	<.100
24...	1340	83631	--	--	--	2.1	<.100
APR							
08...	1300	83631	5.4	26	.38	2.2	<.100
14...	1130	83631	6.9	8	.15	1.3	<.100
20...	1045	83631	3.6	3	.03	1.8	<.100
MAY							
05...	1150	83631	1.3	2	.01	1.4	<.100
19...	1200	83631	.70	2	.00	.95	<.100
JUN							
03...	1030	83631	2.3	6	.04	1.6	<.100
06...	1030	83631	12	23	.75	2.0	<.100
16...	1110	83631	1.6	5	.02	1.1	<.100
29...	1055	83631	78	2060	434	2.4	<.100
29...	1345	83631	78	601	127	2.5	<.100
29...	1730	83631	49	183	24	3.0	<.100
30...	0950	83631	11	23	.68	3.4	<.100
JUL							
13...	1145	83631	1.2	5	.02	1.5	<.100
13...	1150	83631	--	--	--	1.5	<.100
28...	1325	83631	1.3	3	.01	.90	<.100
AUG							
11...	1120	83631	.70	14	.03	.72	<.100
25...	1035	83631	1.8	49	.24	.70	<.100
25...	1040	83631	--	--	--	.70	<.100
SEP							
21...	1110	83631	.44	3	.00	.31	<.100

0424015305 RICE BROOK AT RICE GROVE, NY--Continued

WATER-QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	PHOS-PHORUS, ORGANIC DIS-SOLVED (MG/L AS P)
SEP						
22	2.00	.190	--	.130	--	.02
OCT						
28...	1.20	.136	.120	.100	.12	.01
DEC						
15...	.50	.050	.050	.013	.05	<.00
FEB						
18...	.70	.045	.045	.015	.04	.01
MAR						
10...	.40	.100	.090	.035	.08	.01
12...	2.20	.360	.285	.243	.25	.04
13...	5.90	1.06	1.02	.925	.95	.07
14...	1.60	.230	.180	.150	.16	.02
16...	7.00	.110	.100	.050	.07	.03
17...	1.00	.170	.150	.095	.12	.03
17...	1.20	.180	.160	.145	.15	.01
24...	.80	.080	.040	.015	.04	.01
24...	.80	.085	.045	.015	.03	.01
APR						
08...	.30	.110	.065	.010	.04	.03
14...	.80	.050	.030	.005	.03	.01
20...	.50	.065	.045	.013	.03	.02
MAY						
05...	.50	.095	.060	.015	.04	.02
19...	.60	.065	.060	.008	.04	.03
JUN						
03...	.60	.050	.045	.008	.03	.02
06...	.80	.090	.050	.020	.03	.02
16...	.60	.050	.040	.015	.04	.01
29...	5.20	1.28	.110	.060	.11	.01
29...	2.20	.520	.090	.015	.09	.01
29...	1.80	.280	.065	.025	.07	<.01
30...	.60	.065	.045	.015	.05	<.01
JUL						
13...	.60	.065	.050	.030	.04	.01
13...	.50	.070	.050	.030	.05	.01
28...	.60	.070	.055	.017	.04	.02
AUG						
11...	.20	.075	.055	.018	.05	.01
25...	.60	.115	.060	.005	.05	.02
25...	.40	.125	.065	.010	.06	.01
SEP						
21...	.10	.070	.065	.010	.06	.01

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR							
13...	1130	40	517	56	21	38	55
JUN							
29...	1055	78	2060	434	13	21	31
29...	1345	78	601	127	14	24	34
29...	1530	57	268	41	17	24	34

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
MAR							
13...	73	85	93	97	99	99	100
JUN							
29...	43	57	70	79	90	98	100
29...	47	60	73	81	91	98	100
29...	48	63	77	89	95	99	100

0424015305 RICE BROOK AT RICE GROVE, NY--Continued

SUSPENDED-SEDIMENT, APRIL TO SEPTEMBER 1982

DAY	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DIS- CHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	35	1.4	1	.00	29	.20	10	.13	1	.00	3	.00
2	26	.69	1	.00	28	1.3	6	.07	12	.09	3	.00
3	25	.74	1	.00	6	.04	4	.04	5	.02	3	.00
4	24	.52	2	.01	5	.03	3	.02	2	.00	3	.00
5	24	.40	2	.00	5	.04	3	.02	1	.00	3	.00
6	24	.40	2	.00	23	.95	3	.01	2	.00	3	.00
7	26	.41	2	.00	6	.04	7	.45	1	.00	3	.00
8	26	.38	2	.00	3	.03	16	.68	4	.00	3	.00
9	27	.39	6	.05	3	.02	4	.02	4	.01	2	.00
10	31	.49	4	.02	3	.02	2	.00	3	.00	1	.00
11	29	.52	3	.01	3	.02	2	.00	4	.01	1	.00
12	28	.50	2	.00	3	.01	1	.00	4	.01	1	.00
13	43	1.8	2	.00	3	.01	1	.00	4	.00	1	.00
14	10	.23	2	.00	4	.02	1	.00	2	.00	4	.00
15	7	.12	2	.00	4	.02	1	.00	2	.00	23	.05
16	8	.11	2	.00	5	.06	1	.00	2	.00	9	.02
17	15	.23	2	.00	21	.30	1	.00	2	.00	5	.00
18	13	.18	2	.00	8	.04	1	.00	2	.00	5	.00
19	6	.07	2	.00	3	.01	1	.00	2	.00	4	.00
20	3	.03	2	.00	2	.00	1	.00	4	.01	4	.00
21	5	.08	2	.00	3	.02	1	.00	2	.00	3	.00
22	6	.06	2	.00	2	.00	1	.00	2	.00	3	.00
23	5	.05	10	.04	2	.00	1	.00	3	.00	19	.46
24	4	.04	4	.02	2	.00	2	.00	3	.00	14	.07
25	2	.02	3	.01	2	.00	2	.00	16	.01	4	.00
26	1	.00	2	.00	2	.00	2	.00	9	.02	1	.00
27	1	.00	2	.00	2	.00	2	.00	4	.00	28	.28
28	1	.00	2	.00	2	.00	2	.01	2	.00	12	.04
29	1	.00	2	.00	489	96	3	.00	1	.00	3	.00
30	1	.00	2	.00	26	.78	2	.00	1	.00	1	.00
31	---	---	47	1.7	---	---	2	.00	3	.00	---	---
TOTAL	---	9.86	---	1.86	---	99.96	---	1.45	---	0.18	---	0.92

0424016205 WILLOW BROOK AT LADER POINT, NY

LOCATION.--Lat 42°52'31", Long 76°18'21", Onondaga County, Hydrologic Unit 04140201, on left bank 0.1 mi (0.2 km) off of unnamed camp access road, 0.1 mi (0.2 km) upstream from mouth at Lader Point, and 0.5 mi (0.8 km) south of access road intersection with State Highway 174. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3.73 mi² (9.66 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1981 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (245 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during the period November to September, 182 ft³/s (5.15 m³/s) July 7, gage height, 3.08 ft (0.939 m); maximum gage height, 4.78 ft (1.457 m) Dec. 23 (ice jam); flood of Oct. 28, 1981 was considerably higher, discharge not determined; no flow many days in August and September.

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (cfs)
Sept. 22, 1981	5.6

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		11	4.5	2.4	9.0	.80	18	2.1	2.7	3.9	.16	.00
2		9.0	4.8	2.2	8.0	.80	11	1.7	7.0	2.9	.39	.00
3		8.4	4.8	1.7	5.4	.80	10	1.4	2.4	2.2	.30	.01
4		7.6	4.8	13	11	.80	8.6	1.4	2.1	2.1	.18	.00
5		7.0	4.5	7.4	3.0	.70	7.8	1.4	2.4	1.4	.16	.00
6		8.0	3.4	4.2	1.4	.70	7.4	1.4	14	1.0	.12	.00
7		8.8	2.7	3.4	1.0	.60	7.4	1.4	8.2	3.9	.08	.00
8		8.0	4.0	1.6	.80	.60	7.0	1.7	5.5	7.8	.07	.00
9		9.0	3.8	.80	.60	.50	7.0	2.9	3.9	3.9	.16	.00
10		7.8	3.4	.60	.40	.50	6.8	1.5	2.9	2.7	.08	.00
11		7.0	3.6	.40	.40	.50	8.2	1.0	2.2	2.1	.05	.00
12		5.5	4.0	.40	.60	18	9.0	1.0	1.7	1.7	.03	.00
13		4.8	4.6	.40	.60	60	14	1.0	1.7	1.1	.03	.00
14		4.5	3.4	.40	.80	26	10	.84	1.7	.84	.08	.00
15		4.5	3.4	.40	.80	16	7.8	.74	1.2	.65	.00	.10
16		14	3.4	.40	8.0	12	8.2	.65	1.5	.58	.01	.00
17		12	2.9	.40	4.0	18	8.6	.58	3.9	.51	.00	.00
18		12	2.1	.40	1.0	18	7.8	.51	2.2	.58	.00	.00
19		9.4	1.1	.40	1.4	15	5.5	.65	1.5	.51	.00	.00
20		25	1.1	.40	1.8	15	4.8	.84	1.2	.44	.13	.00
21		14	1.5	.40	1.8	22	6.7	.58	1.2	.44	.05	.00
22		11	1.7	.40	1.7	15	4.5	.39	1.1	.30	.00	.00
23		8.6	36	.40	1.5	13	3.6	1.1	1.4	.26	.00	.39
24		7.0	11	1.4	1.5	15	3.9	.84	1.0	.23	.01	.10
25		6.3	6.7	.40	1.0	15	3.6	.65	.65	.20	.15	.00
26		5.5	4.2	.40	.80	14	3.6	.51	.65	.18	.02	.00
27		6.3	3.9	.40	.80	6.6	3.4	.39	.84	.16	.00	1.9
28	† 63	5.8	3.4	.40	.70	6.2	2.4	.34	.58	.39	.00	.34
29		5.5	3.4	.40	---	7.8	2.4	.39	28	.39	.00	.16
30		4.8	3.2	.40	---	8.0	2.2	.30	7.8	.20	.00	.00
31		---	3.4	.40	---	16	---	5.6	---	.18	.01	---
TOTAL		258.1	148.7	46.70	69.80	343.90	211.2	35.80	113.12	43.74	2.27	3.00
MEAN		8.60	4.80	1.51	2.49	11.1	7.04	1.15	3.77	1.41	.073	.10
MAX		25	36	13	11	60	18	5.6	28	7.8	.39	1.9
MIN		4.5	1.1	.40	.40	.50	2.2	.30	.58	.16	.00	.00
CFSM		2.31	1.29	.41	.67	2.98	1.89	.31	1.01	.38	.02	.03
IN.		2.57	1.48	.47	.70	3.43	2.11	.36	1.13	.44	.02	.03

† Result of discharge measurement.

0424016205 WILLOW BROOK AT LADER POINT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1981 to September 1982.
NUTRIENT DATA: 1982 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: November 1981 to September 1982.

REMARKS.--Samples analyzed by the Onondaga County Department of Drainage and Sanitation are designated by the value 83631 for agency analyzing sample code. Suspended sediment analyses done by U.S. Geological Survey Ohio District laboratory.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean during the period November to September, 181 mg/L Nov. 20; minimum daily mean, 0 mg/L many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily during the period November to September, 25 tons (23 Mg) Mar. 13; minimum daily, 0.00 tons (0.00 Mg) many days.

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
SEP							
22	1030	83631	5.6	69	1.0	2.3	.190
OCT							
28...	1130	83631	63	82	14	3.1	.100
DEC							
15...	1230	83631	3.5	4	.04	4.0	.100
FEB							
17...	1200	83631	4.2	9	.10	.46	.440
MAR							
03...	1400	83631	.80	1	.00	1.5	<.100
10...	1030	83631	.50	2	.00	1.9	<.100
12...	1600	83631	40	24	2.6	.55	1.70
13...	1000	83631	40	156	17	.20	1.80
14...	1400	83631	32	355	31	1.4	1.90
16...	1500	83631	14	--	--	.85	.700
17...	1230	83631	41	190	21	.55	.900
17...	1535	83631	35	93	8.8	1.5	.800
24...	1045	83631	9.4	8	.20	2.7	<.100
24...	1055	83631	--	--	--	2.6	<.100
APR							
08...	0945	83631	6.0	5	.08	2.9	<.100
14...	0915	83631	10	10	.27	3.4	<.100
20...	0830	83631	5.1	6	.08	2.8	<.100
MAY							
05...	0930	80010	--	2	--	1.9	.040
05...	0932	83631	1.3	2	.01	2.1	<.100
05...	0935	80010	--	--	--	2.0	.040
05...	0937	83631	--	--	--	2.1	<.100
05...	0940	80010	--	--	--	1.9	.280
05...	0942	83631	--	--	--	2.1	<.100
05...	0945	80010	--	--	--	1.9	.020
05...	0947	83631	--	--	--	2.0	<.100
19...	0930	83631	.49	2	.00	1.4	<.100
JUN							
03...	0900	83631	2.7	--	--	3.4	<.100
06...	0920	83631	14	29	1.1	5.3	.100
16...	0910	83631	1.5	4	.02	2.1	<.100
29...	0950	83631	23	880	55	1.7	.200
29...	1230	83631	60	409	66	4.1	<.100
29...	1640	83631	23	36	2.2	5.6	.100
30...	0830	83631	9.0	7	.17	5.1	<.100
JUL							
13...	0915	83631	1.1	3	.01	3.0	.200
13...	0920	83631	--	--	--	2.9	.300
28...	1140	83631	.84	0	.00	2.2	.400
AUG							
11...	0920	83631	.07	8	.00	1.8	.200
25...	0855	80010	--	--	--	1.8	<.010
25...	0857	83631	.18	2	.00	2.0	<.100
25...	0900	80010	--	--	--	1.8	<.010
25...	0902	83631	--	--	--	2.0	<.100
25...	0905	80010	--	--	--	1.8	<.010
25...	0907	83631	--	--	--	2.0	<.100
25...	0910	80010	--	--	--	1.7	<.010
25...	0912	83631	--	--	--	2.1	<.100

04240162O5 WILLOW BROOK AT LADER POINT, NY--Continued

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	PHOSPHORUS, ORGANIC DISSOLVED (MG/L AS P)
SEP						
22	2.00	.320	--	.320	--	<.01
OCT						
28...	1.40	.148	.140	.125	.14	.01
DEC						
15...	.50	.060	.055	.025	.06	.01
FEB						
17...	1.50	.120	.110	.065	.10	.01
MAR						
03...	.30	.075	.070	.030	.06	.01
10...	.40	.100	.095	.075	.09	.01
12...	5.40	.480	.450	.415	.43	.02
13...	6.20	.670	.580	.505	.55	.04
14...	6.80	.830	.580	.480	.51	.07
16...	1.30	.175	.140	.115	.12	.02
17...	2.40	.410	.360	.265	.28	.08
17...	2.00	.300	.280	.200	.25	.04
24...	.80	.100	.070	.025	.04	.03
24...	.60	.075	.050	.030	.03	.02
APR						
08...	.40	.065	.055	.010	.03	.03
14...	.70	.060	.050	.010	.04	.02
20...	.40	.080	.050	.015	.04	.01
MAY						
05...	<.10	.060	.050	.030	.05	.00
05...	.60	.100	.080	.030	.07	.02
05...	<.10	.060	.050	.030	.05	.00
05...	.70	.100	.085	.030	.07	.02
05...	.87	.060	<.010	.030	<.01	--
05...	.70	.100	.090	.030	.06	.04
05...	<.10	.080	.050	.030	.06	.00
05...	.50	.100	.095	.030	.06	.04
19...	.80	.090	.070	.035	.06	.01
JUN						
03...	.80	.070	.060	.030	.06	.01
06...	1.50	.150	.080	.060	.06	.02
16...	.60	.085	.060	.043	.06	<.01
29...	5.60	.220	.190	.115	.16	.03
29...	3.40	.660	.185	.085	.15	.04
29...	1.20	.190	.120	.060	.11	.01
30...	.70	.080	.070	.010	.07	.01
JUL						
13...	.40	.090	.070	.040	.07	<.01
13...	.50	.090	.070	.030	.07	<.01
28...	.60	.100	.085	.035	.07	.02
AUG						
11...	1.00	.100	.083	.015	.08	<.01
25...	.40	.050	.040	.040	.05	.00
25...	.60	.105	.080	.035	.08	.01
25...	.50	.060	.040	.040	.05	.00
25...	.60	.095	.088	.045	.09	<.01
25...	.70	.060	.040	.040	.05	.00
25...	.60	.100	.085	.025	.08	.01
25...	.50	.060	.040	.040	.04	.00
25...	.60	.095	.085	.025	.08	.01

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR							
13...	1000	40	156	17	31	49	67
JUN							
29...	0950	23	880	55	25	43	60

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
MAR							
13...	83	90	94	97	98	99	100
JUN							
29...	77	90	97	98	99	100	--

0424016205 WILLOW BROOK AT LADER POINT, NY--Continued

SUSPENDED-SEDIMENT, NOVEMBER 1981 TO SEPTEMBER 1982

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			28	.83	8	.10	6	.04	21	.50	5	.01
2			19	.46	8	.10	5	.03	17	.36	5	.01
3			17	.39	8	.10	4	.02	10	.15	5	.01
4			16	.33	8	.10	31	1.1	24	.72	5	.01
5			14	.26	8	.10	15	.30	6	.05	5	.00
6			16	.35	8	.07	9	.10	5	.02	5	.00
7			19	.45	5	.04	8	.07	4	.01	5	.00
8			16	.35	8	.09	5	.02	5	.01	5	.00
9			19	.46	8	.08	5	.01	5	.00	3	.00
10			16	.34	8	.07	6	.00	0	.00	2	.00
11			14	.26	8	.08	0	.00	0	.00	2	.00
12			11	.16	8	.09	0	.00	6	.00	18	.87
13			9	.12	10	.12	0	.00	6	.00	142	23
14			9	.11	8	.07	0	.00	5	.01	174	15
15			9	.11	8	.07	0	.00	5	.01	48	2.7
16			34	1.3	8	.07	0	.00	17	.36	32	1.0
17			28	.91	7	.05	0	.00	8	.09	72	6.1
18			28	.91	5	.03	0	.00	5	.01	31	2.2
19			20	.51	3	.00	0	.00	5	.02	18	.73
20			181	25	3	.00	0	.00	4	.02	24	1.5
21			34	1.3	5	.02	0	.00	6	.02	29	2.0
22			25	.74	4	.02	0	.00	4	.02	19	.77
23			16	.37	154	15	0	.00	5	.02	24	1.0
24			13	.25	25	.74	5	.02	5	.02	22	1.2
25			11	.19	13	.24	0	.00	4	.01	18	.73
26			9	.13	8	.09	0	.00	5	.01	15	.57
27			11	.19	8	.08	0	.00	5	.01	18	.32
28			10	.16	8	.07	0	.00	5	.00	13	.22
29			9	.13	8	.07	0	.00	---	---	14	.29
30			8	.10	7	.06	0	.00	---	---	13	.28
31			---	---	8	.07	0	.00	---	---	22	.95
TOTAL			---	37.17	---	17.89	---	1.71	---	2.45	---	58.97

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	21	1.0	7	.04	8	.06	7	.07	1	.00	0	.00
2	19	.56	8	.04	22	.63	6	.05	7	.00	0	.00
3	26	.70	8	.03	8	.05	6	.04	4	.00	2	.00
4	16	.37	6	.02	6	.03	6	.03	2	.00	0	.00
5	10	.21	3	.01	5	.03	7	.03	2	.00	0	.00
6	8	.16	2	.00	25	1.2	7	.02	2	.00	0	.00
7	7	.14	2	.00	8	.18	15	1.3	2	.00	0	.00
8	6	.11	3	.01	7	.10	10	.21	2	.00	0	.00
9	7	.13	9	.07	7	.07	4	.04	2	.00	0	.00
10	16	.29	8	.03	7	.05	2	.01	2	.00	0	.00
11	11	.24	4	.01	7	.04	2	.01	2	.00	0	.00
12	11	.27	3	.00	6	.03	2	.00	2	.00	0	.00
13	31	1.6	2	.00	7	.03	3	.00	3	.00	0	.00
14	11	.30	2	.00	7	.03	3	.00	4	.00	0	.00
15	10	.21	2	.00	5	.02	3	.00	5	.00	4	.00
16	9	.20	2	.00	4	.02	2	.00	0	.00	0	.00
17	13	.30	2	.00	12	.13	2	.00	0	.00	0	.00
18	12	.25	2	.00	5	.03	2	.00	0	.00	0	.00
19	7	.10	2	.00	4	.02	2	.00	0	.00	0	.00
20	6	.08	3	.00	2	.00	2	.00	6	.00	0	.00
21	2	.04	3	.00	3	.00	2	.00	3	.00	0	.00
22	0	.00	3	.00	3	.00	1	.00	0	.00	0	.00
23	1	.00	6	.02	3	.01	1	.00	0	.00	6	.00
24	2	.02	7	.02	3	.00	1	.00	2	.00	3	.00
25	5	.05	6	.01	3	.00	1	.00	3	.00	0	.00
26	7	.07	4	.00	4	.00	1	.00	2	.00	0	.00
27	7	.06	3	.00	3	.00	1	.00	0	.00	10	.05
28	7	.05	3	.00	4	.00	1	.00	0	.00	3	.00
29	7	.05	3	.00	183	20	2	.00	0	.00	2	.00
30	7	.04	3	.00	7	.15	1	.00	0	.00	0	.00
31	---	---	22	.56	---	---	1	.00	1	.00	---	---
TOTAL	---	7.60	---	0.87	---	22.91	---	1.81	---	0.00	---	0.05

0424016825 AMBER BROOK AT AMBER, NY

LOCATION.--Lat 42°53'22", Long 76°17'51", Onondaga County, Hydrologic Unit 04140201, on left bank just upstream from culvert on Otisco Valley Road at Amber, 0.1 mi (0.2 km) upstream from mouth, and 0.4 mi (0.6 km) north of intersection with Amber Road. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3.69 mi^2 (9.56 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (244 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during the period March to September, 218 ft^3/s (6.17 m^3/s) Mar. 31, gage height, 3.07 ft (0.936 m); flood of Oct. 28, 1981 was considerably higher, discharge not determined; minimum, 0.20 ft^3/s (0.006 m^3/s) Sept. 14, gage height, 0.90 ft (0.274 m).

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (cfs)
Sept. 22, 1981	9.9

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						2.2	33	3.2	4.9	6.5	.50	.44
2						2.0	15	3.1	8.8	4.9	.74	.44
3						2.0	16	2.9	3.7	4.0	.97	.56
4						2.0	14	2.8	3.5	3.5	.56	.44
5						2.4	10	2.8	4.4	2.7	.62	.40
6						2.2	9.6	2.6	12	2.4	.56	.32
7						2.4	8.0	2.5	7.1	6.7	.44	.32
8						2.2	7.6	3.2	5.2	9.2	.56	.26
9						2.0	7.4	5.6	4.0	4.0	1.8	.26
10						2.0	7.4	3.7	3.3	2.9	.97	.23
11						7.0	11	2.8	3.1	2.6	.68	.23
12						16	10	2.5	2.7	2.1	.68	.23
13						26	24	2.4	2.9	2.1	.62	.23
14						13	14	2.0	2.7	1.4	.62	.20
15			† 4.8			6.4	10	1.8	2.4	1.1	.56	.74
16						6.0	8.6	1.8	3.1	.97	.50	.68
17					† 4.6	30	13	1.7	6.2	.97	.50	.50
18						20	13	1.6	3.3	1.4	.44	.44
19						18	7.7	2.0	2.9	1.8	.40	.32
20						17	6.3	2.4	2.7	1.1	.56	.29
21						29	9.3	1.8	2.9	.97	.68	.29
22						20	6.6	1.8	2.7	.68	.56	.29
23						14	5.8	2.9	2.9	.56	.44	3.7
24					† 3.2	20	5.1	2.5	2.2	.44	.50	2.1
25						22	4.9	2.0	1.8	.36	.81	.81
26						28	4.7	1.7	2.2	.36	.74	.81
27						10	4.9	1.5	2.2	.32	.62	4.4
28	† 66					7.4	3.9	1.7	2.1	1.3	.56	1.9
29						6.8	3.4	1.8	36	1.8	.44	.97
30						15	3.4	1.4	9.7	.68	.40	.74
31						61	---	7.5	---	.62	.40	---
TOTAL						414.0	297.6	80.0	153.6	70.43	19.43	23.54
MEAN						13.4	9.92	2.58	5.12	2.27	.63	.78
MAX						61	33	7.5	36	9.2	1.8	4.4
MIN						2.0	3.4	1.4	1.8	.32	.40	.20
CFSM						3.63	2.69	.70	1.39	.62	.17	.21
IN.						4.17	3.00	.81	1.55	.71	.20	.24

† Result of discharge measurement.

0424016825 AMBER BROOK AT AMBER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1981 to September 1982.
NUTRIENT DATA: 1982 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March to September 1982.

REMARKS.--Samples analyzed by the Onondaga County Department of Drainage and Sanitation are designated by the value 83631 for agency analyzing sample code. Suspended sediment analyses done by U.S. Geological Survey Ohio District laboratory.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean during the period March to September, 400 mg/L June 29; minimum daily mean, 1 mg/L July 11,12,Aug. 29 to Sept. 2, Sept. 25,26.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily during the period March to September, 76 tons (69 Mg) June 29; minimum daily, 0.00 tons (0.00 Mg) many days.

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
SEP							
22	1200	83631	9.9	21	.56	.90	.100
OCT							
28...	1300	83631	66	199	35	1.4	.100
DEC							
15...	1400	83631	4.8	8	.10	1.9	.100
FEB							
17...	1400	83631	4.6	5	.06	.33	.190
MAR							
02...	1240	83631	2.0	3	.02	.95	<.100
10...	1215	83631	2.1	12	.07	1.6	<.100
12...	1530	83631	20	25	1.3	.14	.500
13...	1130	83631	25	433	29	.14	.800
14...	1320	83631	32	309	27	.73	.300
16...	1600	83631	16	16	.69	1.8	.200
17...	1115	83631	36	80	7.8	1.7	.200
17...	1500	83631	41	89	9.9	1.6	.300
24...	1245	83631	12	15	.49	1.7	<.100
24...	1255	83631	12	--	--	1.7	<.100
APR							
08...	1200	83631	12	33	1.1	1.8	<.100
14...	1100	83631	12	8	.26	2.0	<.100
20...	0930	83631	6.8	4	.07	1.5	<.100
MAY							
05...	1120	83631	2.8	1	.01	1.4	<.100
19...	1110	83631	1.7	2	.01	1.1	<.100
JUN							
03...	1000	83631	3.7	7	.07	.95	<.100
06...	1015	83631	11	41	1.2	1.1	<.100
16...	1030	83631	3.1	7	.06	.85	<.100
29...	1030	83631	90	1740	423	.95	<.100
29...	1320	83631	127	1040	357	1.5	<.100
29...	1715	83631	36	288	28	1.9	<.100
30...	0915	83631	12	75	2.4	2.3	<.100
JUL							
13...	1055	80010	--	--	--	1.1	.080
13...	1057	83631	2.2	7	.04	1.1	<.100
13...	1100	80010	--	--	--	1.1	.030
13...	1102	83631	--	--	--	1.1	<.100
13...	1105	80010	--	--	--	1.1	.030
13...	1107	83631	--	--	--	1.1	<.100
13...	1110	80010	--	--	--	1.1	.030
13...	1112	83631	--	--	--	1.1	<.100
28...	1300	83631	1.6	6	.03	.85	<.100
AUG							
11...	1040	83631	.76	14	.03	.75	<.100
25...	1015	80631	.81	1	.00	.80	<.100
25...	1020	83631	--	--	--	.80	<.100
SEP							
21...	1045	83631	.29	2	.00	.50	<.100

0424016825 AMBER BROOK AT AMBER, NY--Continued

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	PHOS-PHORUS, ORGANIC DIS-SOLVED (MG/L AS P)
SEP						
22	.90	.100	--	.080	--	<.01
OCT						
28...	1.40	.140	.136	.120	.13	.01
DEC						
15...	.50	.055	.055	.013	.05	.01
FEB						
17...	.90	.050	.040	.010	.03	.01
MAR						
02...	.02	.045	.040	.005	.03	.01
10...	.40	.060	.055	.045	.05	.01
12...	1.60	.160	.125	.110	.12	.01
13...	3.40	.540	.370	.330	.36	.01
14...	1.40	.250	.160	.145	.16	.01
16...	.60	.090	.065	.025	.05	.02
17...	1.00	.150	.115	.078	.11	.01
17...	1.40	.200	.160	.140	.15	.01
24...	.30	.060	.030	.020	.03	.01
24...	.40	.060	.030	.020	.03	.01
APR						
08...	.60	.070	.040	.008	.04	.00
14...	.70	.030	.025	.005	.03	.00
20...	.50	.060	.040	.008	.03	.02
MAY						
05...	.60	.060	.055	.010	.03	.03
19...	.50	.060	.030	.005	.03	.01
JUN						
03...	.70	.045	.035	.005	.03	.01
06...	.90	.090	.040	.015	.02	.02
16...	.90	.040	.030	.010	.03	<.01
29...	5.60	.790	.060	.015	.05	.01
29...	4.60	.070	.060	.020	.06	.01
29...	1.40	.210	.055	.020	.05	.01
30...	.40	.070	.040	.015	.04	<.01
JUL						
13...	.40	.010	.010	.020	.01	.00
13...	.80	.065	.040	.025	.03	.01
13...	.30	.010	<.010	<.010	<.01	--
13...	.90	.070	.040	.025	.03	.01
13...	.40	.110	<.010	<.010	<.01	--
13...	.80	.070	.040	.025	.03	.01
13...	3.50	.010	<.010	<.010	.01	--
13...	.80	.070	.040	.025	.03	.01
28...	.70	.070	.040	.015	.03	.01
AUG						
11...	.60	.060	.040	.015	.04	<.01
25...	.40	.065	.055	.005	.05	.01
25...	.40	.060	.055	.005	.05	.01
SEP						
21...	.60	.060	.055	.010	.05	.01

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR							
13...	1130	25	433	29	26	43	60
JUN							
29...	1030	90	1740	423	17	27	39
29...	1320	127	1040	357	16	29	43
29...	1425	61	564	93	16	27	41

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
MAR							
13...	79	89	94	97	99	100	--
JUN							
29...	54	71	84	92	97	100	--
29...	60	75	87	93	98	99	100
29...	59	74	85	93	96	99	100

04240168825 AMBER BROOK AT AMBER, NY--Continued

SUSPENDED-SEDIMENT, MARCH TO SEPTEMBER 1982

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											5	.03
2											3	.02
3											6	.03
4											6	.03
5											6	.04
6											5	.03
7											6	.04
8											5	.03
9											6	.03
10											6	.03
11											12	.23
12											32	1.4
13											225	16
14											250	8.8
15											39	1.3
16											18	.62
17											49	4.6
18											36	2.4
19											21	1.0
20											18	1.1
21											29	2.7
22											21	1.1
23											23	1.3
24											31	2.4
25											29	2.1
26											31	2.9
27											25	.68
28											17	.34
29											19	.55
30											26	1.2
31											38	4.9
TOTAL											---	57.93

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	32	2.9	9	.08	20	.26	19	.33	5	.00	1	.00
2	27	1.1	9	.08	39	1.4	12	.16	5	.00	1	.00
3	33	1.4	7	.05	7	.07	9	.10	5	.01	2	.00
4	26	.98	4	.03	7	.07	6	.06	6	.00	2	.00
5	26	.70	2	.02	9	.11	4	.03	6	.01	2	.00
6	21	.54	2	.01	38	1.6	4	.03	7	.01	2	.00
7	21	.45	3	.02	10	.19	11	.96	7	.00	2	.00
8	25	.51	4	.03	10	.14	24	.93	7	.01	2	.00
9	16	.32	11	.17	9	.10	9	.10	12	.06	2	.00
10	20	.75	12	.12	9	.08	3	.08	13	.03	2	.00
11	22	.65	11	.08	9	.08	1	.00	14	.03	2	.00
12	20	.54	9	.06	10	.07	1	.00	12	.02	3	.00
13	57	5.7	8	.05	11	.09	5	.03	11	.02	3	.00
14	12	.54	7	.04	10	.07	5	.02	10	.02	3	.00
15	9	.24	6	.03	9	.06	5	.01	10	.02	8	.02
16	9	.21	5	.02	7	.06	5	.01	10	.01	5	.00
17	22	1.4	4	.02	22	.54	5	.01	10	.01	3	.00
18	23	.81	3	.01	10	.09	11	.04	10	.01	2	.00
19	9	.19	4	.02	9	.07	9	.04	10	.01	2	.00
20	4	.07	8	.05	8	.06	6	.02	9	.01	2	.00
21	19	.55	7	.03	9	.07	6	.02	10	.02	2	.00
22	4	.07	7	.03	8	.06	5	.00	8	.01	2	.00
23	4	.06	18	.16	8	.06	5	.00	7	.00	17	.40
24	4	.06	10	.07	7	.04	5	.00	6	.00	6	.03
25	7	.09	8	.04	6	.03	4	.00	4	.00	1	.00
26	7	.09	8	.04	7	.04	4	.00	3	.00	1	.00
27	8	.11	7	.03	6	.04	5	.00	3	.00	17	.30
28	8	.08	10	.05	6	.04	10	.04	2	.00	6	.03
29	9	.08	14	.07	400	76	8	.04	1	.00	2	.00
30	9	.08	12	.05	60	1.6	6	.01	1	.00	2	.00
31	---	---	40	1.1	---	---	5	.00	1	.00	---	---
TOTAL	---	21.27	---	2.66	---	83.19	---	3.07	---	0.32	---	0.78

0424016975 VANBENTHUYSEN BROOK NEAR AMBER, NY

LOCATION.--Lat 42°53'40", Long 76°18'08", Onondaga County, Hydrologic Unit 04140201, on right bank just upstream from bridge on Otisco Valley Road, 0.1 mi (0.2 km) upstream from mouth, 0.6 mi (1.0 km) north of Amber, and 0.8 mi (1.3 km) north of intersection with Amber Road. Water-quality sampling site at discharge station.

DRAINAGE AREA.--5.84 mi² (15.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (244 m), from topographic map.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during the period March to September, 100 ft³/s (2.83 m³/s) Mar. 13, gage height, 3.36 ft (1.024 m); flood of Oct. 28, 1981 was considerably higher, discharge not determined; minimum daily discharge, 0.17 ft³/s (0.005 m³/s) Sept. 20; minimum gage height, 2.39 ft (0.728 m) Sept. 13, 14.

Discharge measurements made prior to beginning of continuous discharge record

Date	Discharge (cfs)
Sept. 22, 1981	7.6

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						3.2	32	3.8	5.6	4.9	.97	.51
2						3.0	15	3.8	10	3.3	1.0	.51
3						3.0	12	3.5	5.6	2.5	.90	.55
4						3.0	13	2.9	4.0	2.2	.83	.51
5						3.4	11	2.7	4.3	1.9	.83	.46
6						3.2	11	2.5	16	1.8	.77	.42
7						3.8	8.6	2.7	9.1	2.4	.77	.46
8						3.6	10	3.5	4.6	3.3	.83	.38
9						3.4	8.6	6.7	3.3	2.7	.90	.38
10						3.4	9.6	5.9	2.7	2.0	.71	.34
11						9.0	13	4.0	2.4	1.8	.65	.34
12						20	13	3.3	1.9	1.5	.71	.30
13						46	18	3.1	1.9	1.4	.71	.23
14						42	17	2.5	1.8	1.3	.71	.20
15			† 6.9			24	10	2.4	1.6	1.3	.65	.60
16						20	8.6	2.2	1.9	1.1	.60	.51
17					† 8.7	37	9.6	2.2	4.9	1.0	.60	.34
18						32	11	2.0	4.3	1.2	.55	.23
19						29	8.6	2.4	2.5	1.1	.51	.23
20						19	6.7	2.7	2.4	1.0	.55	.17
21						29	8.1	2.4	2.4	.97	.51	.20
22						28	7.1	2.4	2.5	.90	.51	.23
23						21	5.6	3.3	2.7	.90	.55	.83
24					† 5.4	22	5.2	3.3	2.4	.90	.55	1.0
25						24	4.9	2.9	1.9	.83	.60	.60
26						26	4.9	2.4	1.9	.83	.60	.42
27						12	5.6	2.0	1.8	.83	.55	1.5
28						9.0	5.2	2.2	1.6	1.4	.55	1.2
29						9.6	4.0	2.4	14	1.3	.51	.77
30						13	4.0	2.2	12	1.0	.51	.55
31						25	---	6.3	---	1.0	.55	---
TOTAL						529.6	300.9	96.6	134.0	50.56	20.74	14.97
MEAN						17.1	10.0	3.12	4.47	1.63	.67	.50
MAX						46	32	6.7	16	4.9	1.0	1.5
MIN						3.0	4.0	2.0	1.6	.83	.51	.17
CFSM						2.93	1.71	.53	.77	.28	.12	.09
IN.						3.37	1.92	.62	.85	.32	.13	.10

† Result of discharge measurement.

0424016975 VANBENTHUYSEN BROOK NEAR AMBER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1981 to September 1982.
NUTRIENT DATA: 1982 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March to September 1982.

REMARKS.--Samples analyzed by the Onondaga County Department of Drainage and Sanitation are designated by the value 83631 for agency analyzing sample code. Suspended sediment analyses done by U.S. Geological Survey Ohio District laboratory.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean during the period March to September, 208 mg/L Mar.13; minimum daily mean, 0 mg/L many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily during the period March to September, 26 tons (24 Mg) Mar. 13; minimum daily, 0.00 tons (0.00 Mg) many days.

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
SEP							
22	1130	83631	7.6	13	.27	.06	.100
OCT							
28	1230	83631	--	210	--	1.5	<.100
DEC							
15...	1330	83631	6.9	14	.26	1.4	.100
FEB							
17...	1300	83631	8.7	16	.38	.27	.420
MAR							
02...	1340	83631	2.8	2	.02	1.0	<.100
10...	1130	83631	3.4	7	.06	1.3	<.100
12...	1700	83631	29	51	4.0	1.5	.700
13...	1100	83631	46	277	34	.70	1.00
14...	1330	83631	32	171	15	1.5	1.20
16...	1530	83631	28	8	.60	.73	.600
17...	1130	83631	43	26	3.0	1.5	.500
17...	1510	83631	52	20	2.8	.35	.500
24...	1145	83631	17	7	.32	1.5	<.100
24...	1155	83631	--	--	--	1.6	<.100
APR							
08...	1130	83631	17	19	.87	1.2	<.100
14...	1015	83631	19	7	.36	1.3	<.100
20...	0910	83631	5.5	2	.03	.80	<.100
MAY							
05...	1030	83631	2.6	4	.03	.65	<.100
19...	1030	83631	2.0	2	.01	.50	<.100
JUN							
03...	0920	80010	--	--	--	.26	<.010
03...	0922	83631	5.9	17	.27	.25	<.100
03...	0925	80010	--	--	--	.28	<.010
03...	0927	83631	--	--	--	.30	<.100
03...	0930	80010	--	--	--	.27	<.010
03...	0932	83631	--	--	--	.38	<.100
03...	0935	80010	--	--	--	.27	<.010
03...	0937	83631	--	--	--	.30	<.100
06...	0945	83631	19	45	2.3	.30	<.100
16...	1000	83631	2.3	23	.14	.53	<.100
29...	1015	83631	12	159	5.2	.45	<.100
29...	1310	83631	29	125	9.8	.50	<.100
29...	1700	83631	30	165	13	.60	<.100
30...	0900	83631	14	23	.87	.50	<.100
JUL							
13...	1020	83631	1.6	22	.10	.50	<.100
13...	1025	83631	--	--	--	.50	<.100
28...	1240	83631	1.4	3	.01	.40	<.100
AUG							
11...	1005	83631	.80	6	.01	.30	.100
25...	0955	83631	.80	3	.01	.24	<.100
25...	1000	83631	--	--	--	.24	<.100
SEP							
21...	1000	83631	.20	2	.00	.07	<.100
21...	1002	83631	--	--	--	.07	<.100
21...	1004	83631	--	--	--	.06	<.100
21...	1008	83631	--	--	--	.06	<.100
21...	1010	80010	--	--	--	<.10	.020
21...	1015	80010	--	--	--	<.10	.030
21...	1020	80010	--	--	--	<.10	.050
21...	1025	80010	--	--	--	<.10	.030

0424016975 VANBENTHUYSEN BROOK NEAR AMBER, NY--Continued

WATER QUALITY DATA, SEPTEMBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	PHOSPHORUS, ORGANIC DISSOLVED (MG/L AS P)
SEP						
22	.80	.110	--	.070	--	.02
OCT						
28	1.4	.165	.165	.135	.15	.01
DEC						
15...	.50	.045	.045	.015	.04	.00
FEB						
17...	1.20	.075	.075	.025	.07	.01
MAR						
02...	.60	.055	.050	.010	.04	.02
10...	.70	.070	.065	.055	.06	.01
12...	2.60	.250	.220	.025	.17	.05
13...	3.60	.560	.410	.292	.37	.04
14...	2.80	.310	.270	.225	.24	.03
16...	1.10	.110	.080	.055	.08	.01
17...	1.20	.135	.085	.055	.08	.01
17...	1.20	.140	.130	.095	.11	.03
24...	.50	.060	.030	.010	.03	.01
24...	.50	.060	.040	.010	.03	.01
APR						
08...	.40	.070	.060	.008	.05	.02
14...	.80	.040	.030	.018	.02	.01
20...	.60	.060	.040	.008	.03	.02
MAY						
05...	.50	.060	.055	.010	.03	.03
19...	.70	.060	.040	.008	.03	.01
JUN						
03...	.50	.040	<.010	<.010	<.01	--
03...	1.10	.040	.030	.008	.03	.00
03...	.60	.030	<.010	<.010	<.01	--
03...	1.00	.055	.050	.005	.05	.00
03...	.80	.030	<.010	<.010	<.01	--
03...	1.00	.055	.050	.005	.05	.00
03...	.60	.030	<.010	<.010	<.01	--
03...	1.00	.050	.048	.005	.05	.00
06...	1.90	.090	.050	.018	.02	.03
16...	.80	.045	.040	.010	.04	<.01
29...	2.00	.330	.055	.010	.05	.01
29...	1.80	.270	.060	.015	.05	.01
29...	1.10	.115	.055	.020	.05	.01
30...	.80	.060	.040	.010	.04	<.01
JUL						
13...	.50	.070	.040	.030	.04	<.01
13...	.60	.080	.030	.025	.03	<.01
28...	.80	.055	.050	.015	.04	.02
AUG						
11...	.80	.055	.053	.015	.05	.00
25...	.60	.065	.055	.015	.05	.01
25...	.60	.065	.055	.020	.05	.01
SEP						
21...	.20	.080	.075	.010	.07	.01
21...	.20	.090	.075	.010	.07	.01
21...	.20	.095	.085	.010	.08	.01
21...	.20	.075	.070	.010	.06	.01
21...	2.60	.020	<.010	<.010	<.01	--
21...	.80	.010	<.010	<.010	<.01	--
21...	.50	<.010	<.010	<.010	<.01	--
21...	.70	<.010	.010	<.010	.01	.00

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAR							
13...	1100	46	277	34	16	29	44
JUN							
29...	1310	29	125	9.8	21	12	49

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
MAR							
13...	61	73	79	85	92	98	100
JUN							
29...	69	83	93	97	100	--	--

0424016975 VANBENTHUYSEN BROOK NEAR AMBER, NY--Continued

SUSPENDED-SEDIMENT, MARCH TO SEPTEMBER 1982

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											8	.07
2											7	.06
3											7	.06
4											7	.06
5											9	.08
6											8	.07
7											9	.09
8											9	.09
9											5	.05
10											7	.06
11											7	.17
12											40	2.2
13											208	26
14											169	23
15											67	5.3
16											20	.99
17											17	1.9
18											14	1.4
19											11	.86
20											12	.62
21											16	1.3
22											15	1.1
23											14	.79
24											11	.65
25											13	.84
26											15	1.1
27											12	.39
28											11	.27
29											15	.39
30											21	.74
31											38	4.1
TOTAL											---	74.80

DAY	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DIS-CHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	57	5.7	5	.05	22	.36	18	.24	0	.00	2	.00
2	41	1.7	5	.05	32	.98	17	.15	0	.00	1	.00
3	34	1.1	5	.05	16	.24	15	.10	0	.00	1	.00
4	30	1.1	5	.04	15	.16	13	.08	0	.00	0	.00
5	26	.77	4	.03	14	.16	12	.06	0	.00	0	.00
6	21	.62	4	.03	53	2.4	12	.06	0	.00	0	.00
7	18	.42	4	.03	41	1.0	17	.23	0	.00	0	.00
8	16	.43	8	.08	35	.43	19	.17	2	.00	0	.00
9	10	.23	17	.31	33	.29	7	.05	5	.01	0	.00
10	7	.18	17	.27	32	.23	3	.02	7	.01	0	.00
11	9	.32	17	.18	31	.20	3	.01	6	.01	0	.00
12	9	.32	16	.14	31	.16	9	.04	4	.00	0	.00
13	15	1.0	16	.13	34	.17	20	.08	3	.00	1	.00
14	8	.37	17	.11	28	.14	18	.06	3	.00	2	.00
15	4	.11	17	.11	21	.09	11	.04	2	.00	11	.02
16	3	.07	14	.08	14	.07	7	.02	2	.00	6	.00
17	6	.16	11	.07	19	.30	6	.02	2	.00	3	.00
18	6	.18	6	.03	8	.09	13	.09	2	.00	1	.00
19	3	.07	7	.05	7	.05	11	.03	3	.00	1	.00
20	3	.05	4	.03	7	.05	5	.01	3	.00	1	.00
21	10	.22	3	.02	7	.05	5	.01	4	.00	2	.00
22	4	.08	4	.03	7	.05	5	.01	3	.00	2	.00
23	4	.06	4	.04	8	.06	6	.01	4	.00	24	.09
24	4	.06	3	.03	7	.05	6	.01	3	.00	14	.04
25	5	.07	3	.02	7	.04	6	.01	3	.00	4	.00
26	6	.08	3	.02	7	.04	5	.01	4	.00	1	.00
27	7	.11	3	.02	6	.03	4	.00	4	.00	28	.19
28	6	.08	4	.02	5	.02	5	.02	3	.00	12	.04
29	6	.06	4	.03	83	4.6	4	.01	3	.00	3	.00
30	5	.05	4	.02	28	1.0	2	.00	3	.00	1	.00
31	---	---	30	.68	---	---	1	.00	2	.00	---	---
TOTAL	---	15.77	---	2.80	---	13.51	---	1.65	---	0.03	---	0.38

04240180 NINEMILE CREEK NEAR MARIETTA, NY

LOCATION.--Lat 42°55'15", long 76°19'47", Onondaga County, Hydrologic Unit 04140201, on right bank 25 ft (8 m) upstream from bridge on Schuyler Road, 0.9 mi (1.4 km) north of Marietta, and 1.8 mi (2.9 km) downstream from Otisco Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--45.1 mi^2 (117 km^2) revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1963. June 1964 to current year.

REVISED RECORDS.--WRD NY 1971: 1966(M), 1968, 1969.

GAGE.--Water-stage recorder. Datum of gage is 748.25 ft (228.066 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--18 years (water years 1965-82), 41.1 ft^3/s (1.164 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft^3/s (29.2 m^3/s) June 23, 1972, gage height, 8.65 ft (2.637 m); minimum, 0.80 ft^3/s (0.023 m^3/s) Sept. 13, 18, 19, 1966, gage height, 0.61 ft (0.186 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 311 ft^3/s (8.81 m^3/s) Oct. 28, gage height, 5.13 ft (1.564 m); minimum, 1.8 ft^3/s (0.05 m^3/s) Oct. 1, gage height, 0.70 ft (0.213 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	172	93	72	90	22	71	28	13	53	16	31
2	3.4	150	87	70	88	14	82	26	20	48	17	31
3	5.7	132	81	70	92	11	102	23	17	42	16	31
4	4.8	117	77	90	96	12	112	21	16	37	16	31
5	4.3	105	75	96	90	11	118	20	17	32	16	31
6	7.1	110	73	100	88	11	127	18	37	29	16	30
7	14	125	73	100	88	10	121	17	38	28	16	30
8	21	122	76	100	84	10	113	18	36	44	16	30
9	11	118	74	100	82	11	107	20	33	39	16	30
10	10	113	74	100	82	10	103	20	33	33	16	30
11	8.7	102	74	110	84	14	104	19	25	31	18	30
12	7.8	93	74	100	80	20	104	17	22	23	21	30
13	7.4	88	73	100	78	50	111	16	20	17	21	30
14	7.1	81	73	100	74	41	113	14	15	14	21	30
15	6.5	76	73	100	60	29	110	12	13	13	20	28
16	6.4	84	72	98	50	22	106	11	14	17	20	18
17	6.4	96	71	100	40	30	96	10	20	21	20	18
18	6.2	101	72	98	35	28	101	10	19	21	20	17
19	8.4	99	72	100	30	27	103	11	18	18	20	16
20	21	133	72	100	30	24	98	10	14	18	20	16
21	20	135	72	98	30	30	93	8.7	14	18	20	16
22	20	134	72	96	29	25	87	9.7	12	18	19	16
23	27	129	89	96	28	21	81	13	11	18	19	18
24	30	122	79	96	27	23	76	11	9.0	17	23	17
25	29	113	76	94	27	24	70	8.5	7.8	17	31	16
26	29	107	74	92	25	26	61	8.3	7.2	17	32	16
27	85	102	74	92	22	19	46	8.3	6.8	17	32	20
28	219	93	74	92	22	18	36	9.9	6.6	18	32	16
29	225	87	70	90	---	18	34	8.5	37	17	32	16
30	218	86	70	86	---	20	30	7.8	58	17	31	16
31	200	---	70	88	---	40	---	13	---	16	31	---
TOTAL	1271.3	3325	2329	2924	1651	671	2716	447.7	609.4	768	664	705
MEAN	41.0	111	75.1	94.3	59.0	21.6	90.5	14.4	20.3	24.8	21.4	23.5
MAX	225	172	93	110	96	50	127	28	58	53	32	31
MIN	2.1	76	70	70	22	10	30	7.8	6.6	13	16	16

CAL YR 1981 TOTAL 10785.2 MEAN 29.5 MAX 225 MIN 1.3
WTR YR 1982 TOTAL 18081.4 MEAN 49.5 MAX 225 MIN 2.1

04240180 NINEMILE CREEK NEAR MARIETTA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April to September 1982.
NUTRIENT DATA: 1982 (d).
SEDIMENT DATA: 1982 (c).

REMARKS.--Samples analysed by the Onondaga County Department of Drainage and Sanitation are designated by the value 83631 for agency analyzing sample code. Suspended sediment analyses done by U.S. Geological Survey Ohio District laboratory.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1982

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
APR							
08...	1045	83631	112	10	3.0	.65	<.100
14...	1000	83631	112	7	2.1	.75	<.100
MAY							
05...	1010	83631	20	21	1.1	.65	<.100
19...	0950	83631	9.8	30	.79	.55	<.100
JUN							
16...	0945	83631	12	31	1.0	.40	<.100
JUL							
13...	0935	83631	18	--	--	.33	.200
13...	0940	83631	--	--	--	.30	.100
28...	1210	83631	21	38	2.2	.20	.100
AUG							
25...	0940	83631	34	22	2.0	.02	<.100
25...	0945	83631	--	--	--	.02	<.100
SEP							
21...	0930	83631	18	14	.68	.08	<.100

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	PHOSPHORUS, ORGANIC DISSOLVED (MG/L AS P)
APR						
08...	.60	.060	.040	.008	.04	<.01
14...	.70	.040	.030	.008	.02	.01
MAY						
05...	.80	.090	.060	.015	.03	.03
19...	.80	.060	.055	.025	.05	.01
JUN						
16...	.80	.105	.035	.013	.03	.01
JUL						
13...	.60	.080	.030	.025	.03	.01
13...	.70	.090	.040	.030	.04	<.01
28...	1.00	.110	.055	.020	.04	.02
AUG						
25...	.80	.085	.055	.020	.05	.01
25...	.80	.090	.050	.015	.05	.01
SEP						
21...	.30	.080	.075	.015	.07	.01

04240200 NINEMILE CREEK AT CAMILLUS, NY

LOCATION.--Lat 43°02'21", long 76°18'30", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft (9.1 m) downstream from highway bridge on State Highway 5 (Main Street) in Camillus, and 7.2 mi (11.6 km) upstream from Onondaga Lake.

DRAINAGE AREA.--84.3 mi^2 (218 km^2).

PERIOD OF RECORD.--July 1958 to September 1982 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 398.56 ft (121.481 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--24 years, 113 ft^3/s (3.200 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,760 ft^3/s (78.2 m^3/s) Mar. 30, 1960, gage height, 8.25 ft (2.515 m); maximum gage height, 10.83 ft (3.301 m) Sept. 26, 1975; minimum discharge, 16 ft^3/s (0.45 m^3/s) Sept. 30, Oct. 1, 2, 1961; minimum gage height, 1.02 ft (0.311 m) Aug. 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,820 ft^3/s (51.5 m^3/s) Oct. 28, gage height, 8.05 ft (2.454 m); minimum daily discharge, 41 ft^3/s (1.161 m^3/s) Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	283	157	155	152	67	246	90	77	96	49	56
2	49	240	162	157	149	67	178	87	111	84	50	57
3	64	209	152	140	152	57	183	83	82	78	51	57
4	66	188	149	208	192	52	202	79	72	73	48	56
5	57	173	143	324	163	59	195	77	74	67	49	55
6	68	172	141	206	146	56	209	75	168	63	48	55
7	102	206	137	194	135	57	197	74	128	60	47	55
8	196	209	151	165	134	55	190	80	100	79	49	55
9	128	220	152	170	131	53	188	101	88	73	58	54
10	94	194	146	149	126	54	194	88	80	66	51	54
11	77	177	143	160	122	77	204	79	74	63	46	54
12	68	162	143	149	126	155	206	75	66	60	50	54
13	63	154	141	151	120	344	213	73	65	52	50	54
14	59	146	140	157	119	404	220	71	60	48	51	54
15	56	141	140	154	120	222	194	68	55	47	49	73
16	55	163	140	152	112	160	182	66	58	45	49	51
17	53	220	137	152	118	269	182	65	85	54	48	45
18	53	204	137	149	105	213	200	64	73	66	48	43
19	58	197	132	152	92	209	178	68	70	62	47	41
20	65	337	134	152	85	157	170	75	66	56	50	43
21	66	308	134	147	85	182	172	68	57	54	48	42
22	65	277	134	141	83	183	159	67	57	52	47	42
23	71	242	239	147	82	149	147	78	63	51	47	56
24	83	224	256	147	80	146	140	79	54	50	47	52
25	78	202	183	146	77	154	134	72	49	49	58	45
26	84	187	160	143	75	167	128	67	50	49	58	43
27	528	199	152	140	71	134	119	65	49	49	57	71
28	1210	178	149	138	68	115	102	70	46	65	57	54
29	550	167	149	135	---	115	97	77	89	57	56	49
30	402	157	144	131	---	126	93	66	118	51	56	45
31	337	---	138	132	---	155	---	75	---	49	56	---
TOTAL	4947	6136	4715	4943	3220	4413	5222	2322	2284	1868	1575	1565
MEAN	160	205	152	159	115	142	174	74.9	76.1	60.3	50.8	52.2
MAX	1210	337	256	324	192	404	246	101	168	96	58	73
MIN	42	141	132	131	68	52	93	64	46	45	46	41

CAL YR 1981 TOTAL 35222 MEAN 96.5 MAX 1210 MIN 25
WTR YR 1982 TOTAL 43210 MEAN 118 MAX 1210 MIN 41

04240300 NINEMILE CREEK AT LAKELAND, NY

LOCATION.--Lat 43°04'51", long 76°13'36", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft (9 m) downstream from bridge on State Highway 48, 0.6 mi (1.0 km) downstream from Geddes Brook, and 0.7 mi (1.1 km) upstream from mouth.

DRAINAGE AREA.--115 mi² (298 km²).

PERIOD OF RECORD.--Occasional measurements, water years 1959-70. November 1970 to September 1973, July 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 360.67 ft (109.93 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow regulated by Otisco Lake from which water is diverted for city of Syracuse water supply.

AVERAGE DISCHARGE.--9 years (1972-73, 1976-81), 234 ft³/s (6.627 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,960 ft³/s (83.8 m³/s) Mar. 5, 1979; maximum gage height, 8.75 ft (2.667 m) Sept. 26, 1975; minimum daily discharge, 28 ft³/s (0.79 m³/s) Aug. 30, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,460 ft³/s (69.7 m³/s) Oct. 28; maximum gage height, 8.07 ft (2.460 m) Oct. 28; minimum daily discharge, 73 ft³/s (2.07 m³/s) Aug. 22; minimum gage height, 2.04 ft (0.622 m) Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	531	232	244	217	104	292	122	117	165	79	88
2	98	466	227	254	206	103	239	123	215	148	85	90
3	110	381	202	230	219	89	259	119	141	143	82	93
4	120	332	200	226	264	89	264	114	116	137	78	89
5	140	329	196	616	212	110	276	106	122	128	91	96
6	160	312	206	376	196	106	318	107	323	112	94	94
7	190	338	196	365	183	109	300	113	260	112	95	85
8	274	338	227	307	190	99	297	120	199	130	103	81
9	244	341	271	307	179	105	305	166	191	119	116	76
10	181	321	303	254	158	102	282	141	153	106	116	78
11	150	291	379	246	158	158	313	117	141	104	95	79
12	141	252	365	261	175	310	340	107	125	106	93	79
13	121	239	264	241	162	561	323	113	126	90	90	81
14	104	219	259	264	156	950	348	102	128	82	100	81
15	88	204	244	261	164	634	326	96	109	85	88	100
16	83	237	215	237	166	449	318	96	119	86	82	91
17	94	294	217	752	177	724	256	96	150	82	85	80
18	92	224	217	733	156	565	266	86	125	98	82	74
19	95	215	210	287	151	485	210	98	113	103	75	75
20	92	359	208	215	134	394	198	113	123	94	85	75
21	102	442	200	206	134	420	212	95	125	94	81	74
22	98	459	177	192	136	445	196	91	128	90	73	75
23	111	353	365	210	139	351	190	109	140	89	74	99
24	139	329	456	215	137	318	196	116	126	86	82	95
25	131	276	342	219	126	337	194	106	115	84	89	82
26	155	260	302	210	122	334	196	100	113	88	89	75
27	601	309	276	173	113	356	187	95	100	84	89	128
28	2460	294	256	175	102	239	168	95	91	109	88	100
29	1690	271	254	171	---	215	134	109	132	108	85	91
30	932	234	241	190	---	142	137	94	193	89	88	89
31	588	---	234	185	---	149	---	113	---	84	88	---
TOTAL	9674	9450	7941	8822	4632	9552	7540	3378	4359	3235	2740	2593
MEAN	312	315	256	285	165	308	251	109	145	104	88.4	86.4
MAX	2460	531	456	752	264	950	348	166	323	165	116	128
MIN	83	204	177	171	102	89	134	86	91	82	73	74

CAL YR 1981 TOTAL 60207 MEAN 165 MAX 2460 MIN 28
WTR YR 1982 TOTAL 73916 MEAN 203 MAX 2460 MIN 73

04240495 ONONDAGA LAKE AT LIVERPOOL, NY

LOCATION.--Lat 43°06'01", long 76°12'34", Onondaga County, Hydrologic Unit 04140201, on north shore of Onondaga Lake at Onondaga Park Marina basin, 200 ft (61 m) southwest of Onondaga Lake Parkway, and 1.9 mi (3.1 km) upstream from outlet of lake.

DRAINAGE AREA.--285 mi² (738 km²).

PERIOD OF RECORD.--October 1970 to current year. Elevation records, at Barge Canal datum, since February 1927 collected by, and in files of, New York State Department of Transportation at Syracuse.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake elevation regulated by operation of Erie (Barge) Canal. Area of water surface, 4.60 mi² (11.9 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 369.21 ft (112.535 m) June 30, 1972; minimum, 361.54 ft (110.197 m) Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 366.29 ft (111.645 m) Nov. 1; minimum, 361.88 ft (110.301 m) May 18.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	362.63	366.28	363.67	363.13	363.18	362.89	364.54	362.70	363.03	363.33	362.70	362.63
2	362.69	366.15	363.61	363.10	363.16	362.82	364.44	362.55	363.41	363.34	362.79	362.62
3	362.84	365.94	363.68	362.96	363.13	362.65	364.31	362.53	363.06	363.34	362.75	362.81
4	362.94	365.75	363.69	363.08	362.92	362.31	364.37	362.69	362.79	363.35	362.48	362.79
5	362.99	365.52	363.71	363.54	362.86	362.22	364.37	362.57	362.95	363.25	362.77	362.65
6	363.16	365.32	363.71	363.62	362.89	362.60	364.33	363.14	363.33	362.98	362.90	362.62
7	363.15	365.22	363.61	363.62	362.96	362.77	364.24	363.01	363.56	362.84	362.98	362.74
8	363.40	365.13	363.62	363.52	363.09	362.82	364.06	362.66	363.94	362.99	363.07	362.73
9	363.75	365.05	363.64	363.28	363.21	362.82	363.91	363.02	363.94	362.91	362.76	362.64
10	363.63	364.92	363.67	362.84	363.25	362.78	363.84	362.92	363.76	362.69	363.00	362.62
11	363.52	364.76	363.65	362.45	363.32	362.72	363.82	362.58	363.27	362.89	362.92	362.67
12	363.57	364.58	363.60	362.69	363.35	362.85	363.83	362.54	363.18	362.96	362.80	362.63
13	363.41	364.31	363.56	363.05	363.31	362.89	363.80	362.94	363.27	362.85	362.72	362.70
14	363.10	363.93	363.50	363.14	363.23	363.76	363.80	362.70	363.25	362.69	362.95	362.71
15	362.91	363.61	363.47	363.10	363.17	364.57	363.95	362.62	363.13	362.81	362.81	362.66
16	362.87	363.55	363.48	363.02	363.17	364.56	363.95	362.91	363.23	362.89	362.69	362.79
17	362.95	363.50	363.55	362.84	363.17	364.71	363.91	362.84	363.19	362.85	362.90	362.77
18	362.99	363.68	363.56	362.84	363.23	365.11	363.94	362.19	363.01	362.65	362.90	362.62
19	362.95	364.02	363.49	362.78	363.31	365.29	363.97	362.48	363.02	362.66	362.72	362.67
20	362.79	364.59	363.40	362.51	363.21	365.32	363.81	362.94	363.26	362.81	362.90	362.70
21	362.78	364.73	363.27	362.49	363.11	365.33	363.50	362.65	363.34	362.88	362.86	362.63
22	362.74	364.83	363.04	362.46	363.04	365.39	363.10	362.75	363.34	362.89	362.63	362.67
23	362.74	364.88	363.11	362.47	362.96	365.23	362.96	362.82	363.29	362.86	362.67	362.72
24	362.78	364.80	363.56	362.44	362.88	365.00	362.94	362.87	363.30	362.89	362.82	362.87
25	362.79	364.63	363.64	362.43	362.85	364.76	362.87	362.91	363.23	362.88	362.86	362.80
26	362.81	364.42	363.67	362.39	362.80	364.60	362.74	362.92	363.06	362.86	362.79	362.67
27	363.33	364.27	363.62	362.42	362.96	364.45	362.74	362.92	362.74	362.81	362.76	362.87
28	364.93	364.16	363.54	362.84	362.97	364.18	362.80	362.77	362.63	362.77	362.67	362.89
29	365.76	364.01	363.45	363.02	---	364.01	362.80	362.77	362.92	362.91	362.71	362.87
30	366.05	363.84	363.28	363.12	---	364.23	362.79	362.79	363.19	362.91	362.63	362.90
31	366.24	---	363.15	363.15	---	364.32	---	362.93	---	362.81	362.70	---
MEAN	363.39	364.68	363.52	362.91	363.10	363.87	363.68	362.76	363.22	362.92	362.79	362.72
MAX	366.24	366.28	363.71	363.62	363.35	365.39	364.54	363.14	363.94	363.35	363.07	362.90
MIN	362.63	363.50	363.04	362.39	362.80	362.22	362.74	362.19	362.63	362.65	362.48	362.62

CAL YR 1981 MEAN 363.19 MAX 366.28 MIN 361.88
WTR YR 1982 MEAN 363.30 MAX 366.28 MIN 362.19

04242500 EAST BRANCH FISH CREEK AT TABERG, NY

LOCATION.--Lat 43°18'06", long 75°37'09", Oneida County, Hydrologic Unit 04140202, on left bank at downstream side of bridge on Main Street at Taberg, just downstream from Furnace Creek, 300 ft (91 m) upstream from bridge on State Highway 69, and 2.8 mi (4.5 km) upstream from confluence of East and West Branches near Blossvale.

DRAINAGE AREA.--188 mi^2 (487 km^2).

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1034: 1944. WSP 1054: 1923-45.

GAGE.--Water-stage recorder. Datum of gage is 490.12 ft (149.389 m) National Geodetic Vertical Datum of 1929. Prior to May 20, 1969, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor. Diversion above station for municipal supply by cities of Rome and Oneida (1982 average, 25 ft^3/s or 0.71 m^3/s). Diurnal fluctuation at low flow caused by diversion and small power operations upstream.

AVERAGE DISCHARGE.--59 years (water years 1924-82), 542 ft^3/s (15.35 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft^3/s (411 m^3/s) June 22, 1972, gage height, 11.71 ft (3.569 m); minimum, 4.9 ft^3/s (0.14 m^3/s) Aug. 15, 16, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,900 ft^3/s (140 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1200	8,090	229	8.45	2.576	Apr. 18	0030	*9,920	281	*9.20	2.804

Minimum discharge, 34 ft^3/s (0.96 m^3/s) Sept. 14, gage height, 0.58 ft (0.179 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	653	300	290	300	180	3080	929	929	305	44	66
2	484	575	368	290	360	170	2400	792	2200	182	72	68
3	475	497	413	320	420	170	2810	664	1030	148	106	154
4	442	446	383	400	540	180	3170	538	571	128	71	196
5	353	409	346	600	500	190	1950	442	450	108	71	161
6	471	638	310	700	450	190	1400	386	1180	95	57	117
7	1510	844	320	580	400	180	1000	375	979	98	48	89
8	2170	624	300	450	360	180	850	350	566	379	51	71
9	1200	538	290	400	330	170	780	552	390	247	227	57
10	748	454	300	350	310	179	740	524	289	142	506	50
11	561	409	300	320	290	184	753	379	255	104	270	46
12	458	386	290	290	270	264	653	312	250	100	161	43
13	394	346	290	280	260	380	721	295	252	93	117	40
14	353	332	300	270	250	580	1230	252	233	75	103	37
15	325	325	300	260	240	600	1580	219	201	58	89	44
16	312	442	290	250	250	580	2240	196	206	51	72	98
17	302	467	280	240	250	580	4520	184	386	47	60	134
18	471	409	290	240	240	560	7120	163	368	79	49	104
19	1180	406	240	230	240	560	3320	150	255	136	42	90
20	941	628	240	230	230	547	3060	196	217	84	55	80
21	643	827	250	220	230	556	4040	250	201	62	75	77
22	501	710	270	220	220	590	2350	201	222	50	60	69
23	547	542	330	220	210	556	1520	270	222	46	49	163
24	759	440	450	220	200	575	1900	421	199	41	49	510
25	590	340	400	210	190	674	2450	371	170	39	270	322
26	585	320	360	210	190	992	2450	276	179	38	628	199
27	2560	480	350	210	190	874	2300	214	219	36	292	594
28	5680	684	340	210	180	776	1630	209	177	82	165	1210
29	2740	500	340	210	---	694	1210	438	386	80	120	572
30	1230	370	330	220	---	658	1060	394	633	46	98	335
31	815	---	300	230	---	1440	---	628	---	46	80	---
TOTAL	30206	15041	9870	9370	8100	15009	64287	11570	13815	3225	4157	5796
MEAN	974	501	318	302	289	484	2143	373	461	104	134	193
MAX	5680	844	450	700	540	1440	7120	929	2200	379	628	1210
MIN	302	320	240	210	180	170	653	150	170	36	42	37

CAL YR 1981 TOTAL 205867 MEAN 564 MAX 6000 MIN 36
WTR YR 1982 TOTAL 190446 MEAN 522 MAX 7120 MIN 36

04243500 ONEIDA CREEK AT ONEIDA, NY

LOCATION.--Lat 43°05'51", long 75°38'22", Oneida County, Hydrologic Unit 04140202, on right bank 70 ft (21 m) upstream from bridge on Sconondoa Street at Oneida, and 500 ft (152 m) downstream from Sconondoa Creek.

DRAINAGE AREA.--113 mi² (293 km²).

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-78-1: 1951, 1956, 1958, 1961, 1963, 1964, 1972, 1976 (P).

GAGE.--Water-stage recorder. Datum of gage is 409.33 ft (124.764 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Occasional regulation by small mills upstream from station.

AVERAGE DISCHARGE.--33 years, 165 ft³/s (4.673 m³/s), 19.83 in/yr (504 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft³/s (314 m³/s) Oct. 9, 1976, gage height, 15.01 ft (4.575 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 5, 6, 1962, Oct. 28, 1964; minimum gage height, 1.30 ft (0.396 m) Aug. 3, 6, 1955, Aug. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (53.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	1345	*2,220	62.9	*8.86	2.701
Mar. 13	1630	Ice jam		8.69	2.649

Minimum discharge, 24 ft³/s (0.68 m³/s) Sept. 14, 21, gage height, 1.61 ft (0.491 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	219	150	130	120	84	1130	102	222	187	41	30
2	93	187	140	140	130	80	579	98	519	125	44	30
3	128	159	130	130	140	78	598	94	189	103	50	31
4	198	145	120	400	150	68	869	90	136	93	42	29
5	115	135	110	300	140	74	440	86	120	81	41	28
6	213	170	110	220	130	76	340	84	702	73	39	27
7	547	214	110	180	120	76	310	84	316	69	37	26
8	991	207	120	170	110	68	320	81	180	127	40	26
9	565	231	120	170	96	68	280	99	131	82	103	26
10	301	187	110	160	90	90	303	111	105	67	86	26
11	211	162	100	130	90	200	300	90	100	61	52	25
12	169	143	100	120	90	900	287	84	89	60	44	25
13	144	125	98	120	90	1100	346	87	82	57	40	25
14	126	119	96	120	100	900	397	75	81	47	37	25
15	113	125	96	100	120	600	302	70	75	48	37	33
16	109	183	98	100	140	680	270	67	85	48	35	33
17	103	165	96	100	160	1020	346	66	210	48	33	29
18	95	163	98	100	150	758	602	64	127	58	33	28
19	107	242	96	100	140	781	314	66	95	104	32	28
20	106	481	94	98	120	646	226	80	95	62	34	28
21	92	459	100	96	120	814	274	70	90	54	38	26
22	85	356	120	96	100	814	212	61	95	48	32	25
23	108	292	516	96	90	597	179	114	106	46	31	50
24	129	258	520	96	86	597	155	116	80	44	30	62
25	101	218	283	96	86	693	140	85	70	42	33	33
26	97	184	195	96	84	910	138	73	74	41	37	30
27	838	287	164	94	82	508	167	66	76	40	30	47
28	1500	270	154	92	84	370	133	64	69	54	30	40
29	638	216	153	90	---	370	117	99	815	69	29	33
30	360	180	138	90	---	415	108	108	513	46	29	30
31	264	---	120	90	---	857	---	305	---	41	28	---
TOTAL	8725	6482	4655	4120	3158	15292	10182	2839	5647	2125	1247	934
MEAN	281	216	150	133	113	493	339	91.6	188	68.5	40.2	31.1
MAX	1500	481	520	400	160	1100	1130	305	815	187	103	62
MIN	79	119	94	90	82	68	108	61	69	40	28	25
CFSM	2.49	1.91	1.33	1.18	1.00	4.36	3.00	.81	1.66	.61	.36	.28
IN.	2.87	2.13	1.53	1.36	1.04	5.03	3.35	.93	1.86	.70	.41	.31

CAL YR 1981 TOTAL 52279 MEAN 143 MAX 1500 MIN 20 CFSM 1.27 IN 17.21
WTR YR 1982 TOTAL 65406 MEAN 179 MAX 1500 MIN 25 CFSM 1.58 IN 21.53

04245000 LIMESTONE CREEK AT FAYETTEVILLE, N.Y.

LOCATION.--Lat 43°01'48", long 76°00'49", Onondaga County, Hydrologic Unit 04140202, on left bank 100 ft (30 m) downstream from bridge on Genesee Street at Fayetteville, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--85.5 mi^2 (221 km^2), not including 14.0 mi^2 (36.3 km^2) of Middle Branch Tioughnioga Creek basin, flow from which may be completely diverted into Limestone Creek basin through DeRuyter Reservoir, and 0.8 mi^2 (2.07 km^2) in closed basin.

PERIOD OF RECORD.--November 1939 to current year.

REVISED RECORDS.--WSP 954: 1941. WSP 1912: 1958 (M).

GAGE.--Water-stage recorder. Datum of gage is 427.73 ft (130.372 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Canal diverts water from Limestone Creek about 3 mi (5 km) above station and returns water to creek about 400 ft (122 m) above station. Flow regulated by DeRuyter Reservoir.

AVERAGE DISCHARGE.--42 years (water years 1941-82), 142 ft^3/s (4.021 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,490 ft^3/s (212 m^3/s) Oct. 28, 1981, gage height, 10.14 ft (3.091 m), from rating curve extended above 4,200 ft^3/s (119 m^3/s); minimum, 1.4 ft^3/s (0.040 m^3/s) Aug. 19. 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,490 ft^3/s (212 m^3/s) Oct. 28 at 0545 hours, gage height, 10.14 ft (3.091 m), no other peak above base of 1,500 ft^3/s (42.5 m^3/s); minimum, 22 ft^3/s (0.62 m^3/s) Sept. 13, 14, gage height, 1.46 ft (0.445 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	277	161	161	68	67	711	112	179	127	41	28
2	130	247	181	156	110	74	368	106	247	96	43	28
3	226	217	173	112	168	65	326	102	153	86	60	28
4	250	198	158	307	315	61	515	96	127	79	43	27
5	158	190	148	438	263	73	307	91	121	70	39	27
6	234	226	139	235	201	67	284	89	215	64	37	25
7	483	284	132	190	166	71	223	86	179	62	37	27
8	836	256	148	140	120	64	229	87	125	166	39	25
9	811	299	148	130	100	58	223	173	104	84	107	25
10	375	238	136	120	90	67	232	187	91	65	67	23
11	250	209	136	120	88	89	256	112	86	59	48	23
12	206	190	130	120	86	270	244	98	74	59	41	23
13	181	168	120	120	84	562	315	96	76	49	39	23
14	163	163	120	110	84	780	376	82	73	46	35	23
15	149	163	120	110	84	505	263	74	62	44	34	35
16	142	206	110	100	104	359	244	70	68	42	30	41
17	137	254	100	100	123	562	334	67	151	40	28	28
18	132	241	90	100	104	531	562	61	102	43	28	27
19	161	259	80	90	104	562	284	61	76	89	28	25
20	143	456	80	82	100	380	223	65	74	54	30	25
21	125	376	80	80	100	515	250	61	71	46	32	25
22	117	307	90	80	98	510	203	57	73	42	30	25
23	150	270	303	70	95	376	176	93	65	39	28	45
24	183	250	351	68	89	402	158	116	61	38	28	65
25	140	209	220	66	79	485	144	87	54	36	30	37
26	135	192	173	64	76	617	136	70	57	36	32	30
27	692	254	161	62	74	376	158	61	58	35	28	52
28	3810	220	153	62	73	247	134	61	54	43	27	52
29	1060	192	151	62	---	226	121	76	315	67	27	37
30	456	171	139	62	---	244	118	73	284	48	25	34
31	330	---	123	60	---	472	---	173	---	43	26	---
TOTAL	12477	7182	4554	3777	3246	9737	8117	2843	3475	1897	1167	938
MEAN	402	239	147	122	116	314	271	91.7	116	61.2	37.6	31.3
MAX	3810	456	351	438	315	780	711	187	315	166	107	65
MIN	112	163	80	60	68	58	118	57	54	35	25	23
CFSM	4.70	2.80	1.72	1.43	1.36	3.67	3.17	1.07	1.36	.72	.44	.37
IN.	5.43	3.12	1.98	1.64	1.41	4.24	3.53	1.24	1.51	.83	.51	.41

CAL YR 1981 TOTAL 51009 MEAN 140 MAX 3810 MIN 16 CFSM 1.64 IN 22.19
WTR YR 1982 TOTAL 59410 MEAN 163 MAX 3810 MIN 23 CFSM 1.91 IN 25.85

04245200 BUTTERNUT CREEK NEAR JAMESVILLE, NY

LOCATION.--Lat 42°56'02", long 76°03'44", Onondaga County, Hydrologic Unit 04140202, on left bank 15 ft (5 m) downstream from bridge on Walberger Road, 125 ft (38 m) downstream from tributary from Stebbins Gulf, 2.2 mi (3.5 km) upstream from Jamesville Reservoir, and 4 mi (6 km) south of Jamesville.

DRAINAGE AREA.--32.2 mi² (83.4 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-58. July 1958 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.93 ft (218.825 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--24 years, 50.4 ft³/s (1.427 m³/s), 21.26 in/yr (540 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,820 ft³/s (79.9 m³/s) July 3, 1974, gage height, 7.84 ft (2.390 m); maximum gage height, 8.46 ft (2.579 m) Oct. 28, 1981; minimum discharge, 2.0 ft³/s (0.057 m³/s) Sept. 27, 1959, gage height, 2.26 ft (0.689 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,880 ft³/s (53.2 m³/s) Oct. 28 at 0800 hours, gage height, 8.46 ft (2.579 m), no other peak above base of 550 ft³/s (15.6 m³/s); minimum daily discharge, 5.9 ft³/s (0.17 m³/s) Sept. 13; minimum gage height, 4.81 ft (1.466 m) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	118	52	53	30	20	283	43	55	44	11	9.2
2	44	100	59	45	50	16	145	41	82	34	17	8.3
3	59	85	56	55	62	15	154	39	45	30	19	8.7
4	55	75	51	124	74	13	184	37	41	29	13	7.5
5	43	68	48	134	60	15	124	34	41	25	13	7.1
6	78	92	44	85	50	14	107	34	77	23	11	6.7
7	126	104	43	64	45	15	98	32	61	33	9.3	6.5
8	201	96	51	54	40	15	111	35	43	77	26	6.6
9	138	106	48	47	36	16	88	73	35	37	43	6.4
10	96	83	44	44	34	17	93	56	31	25	18	6.2
11	78	73	41	40	32	55	96	39	29	22	13	6.0
12	67	64	40	42	28	100	90	34	27	21	11	6.0
13	61	56	39	42	26	255	124	34	27	18	10	5.9
14	55	55	38	42	25	213	130	29	25	18	9.9	7.1
15	51	53	38	38	28	140	102	27	23	16	9.3	39
16	48	78	38	35	45	110	96	26	28	15	8.8	17
17	45	104	35	33	39	152	141	26	66	14	9.0	11
18	47	88	34	31	32	161	189	24	35	18	8.8	9.3
19	55	79	33	30	29	161	111	27	27	21	8.1	8.7
20	48	165	32	30	27	136	90	27	28	16	9.0	8.1
21	40	130	33	29	26	181	105	23	28	14	9.3	8.0
22	38	106	39	29	24	172	83	25	25	13	8.2	7.8
23	59	92	130	28	22	142	73	45	23	12	7.8	28
24	59	83	98	26	21	161	67	39	21	11	8.0	25
25	47	73	70	24	20	186	62	29	19	10	9.6	13
26	45	68	56	21	20	280	59	25	21	9.8	9.6	10
27	260	81	52	21	19	148	62	22	20	9.3	7.8	47
28	1260	70	51	21	18	120	55	25	18	21	7.8	24
29	531	62	49	20	---	110	49	29	166	21	7.4	15
30	199	56	44	20	---	120	45	23	86	12	7.1	12
31	142	---	44	21	---	252	---	85	---	11	8.1	---
TOTAL	4114	2563	1530	1328	962	3511	3216	1087	1253	680.1	367.9	381.1
MEAN	133	85.4	49.4	42.8	34.4	113	107	35.1	41.8	21.9	11.9	12.7
MAX	1260	165	130	134	74	280	283	85	166	77	43	47
MIN	38	53	32	20	18	13	45	22	18	9.3	7.1	5.9
CFSM	4.13	2.65	1.53	1.33	1.07	3.51	3.32	1.09	1.30	.68	.37	.39
IN.	4.75	2.96	1.77	1.53	1.11	4.06	3.72	1.26	1.45	.79	.43	.44

CAL YR 1981 TOTAL 19358.9 MEAN 53.0 MAX 1260 MIN 4.0 CFSM 1.65 IN 22.36
WTR YR 1982 TOTAL 20993.1 MEAN 57.5 MAX 1260 MIN 5.9 CFSM 1.79 IN 24.25

04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY

LOCATION.--Lat 43°02'30", long 76°06'02", Onondaga County Hydrologic Unit 04140202, on right bank 170 ft (52 m) downstream from culvert at intersection of Hurlburt Road and Meadowbrook Drive, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--2.90 mi² (7.51 km²).

PERIOD OF RECORD.--December 1970 to March 1973, April 1973 to September 1978 (peak discharge only), October 1978 to current year.

GAGE.--Water-stage recorder and artificial control. Datum of gage is 511.50 ft (155.905 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those below 2.0 ft³/s (0.057 m³/s), which are poor. Flow includes storm sewer inflow, some originating outside the basin.

AVERAGE DISCHARGE.--5 years (water years 1972, 1979-82), 2.00 ft³/s (0.057 m³/s), 9.37 in/yr (238 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 475 ft³/s (13.5 m³/s) July 3, 1974, gage height, 4.82 ft (1.469 m), on basis of culvert measurement of peak flow; minimum, 0.02 ft³/s (0.001 m³/s) Sept. 11, 1972; minimum gage height, 0.27 ft (0.082 m) Oct. 8, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft³/s (2.82 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	0245	*180	5.10	*3.43	1.045	June 29	1045	168	4.76	3.35	1.021

Minimum discharge, 0.11 ft³/s (0.003 m³/s) Sept. 5-9, gage height, 1.05 ft (0.320 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.4	2.3	1.6	2.2	1.6	2.8	1.5	3.0	1.4	.57	.14
2	1.1	1.3	1.9	1.6	1.3	1.6	1.9	1.5	4.1	1.1	.83	.17
3	1.7	1.2	1.7	1.6	3.9	1.3	2.2	1.6	1.3	1.1	.55	.46
4	.83	1.2	1.5	7.0	3.1	1.6	2.3	1.8	1.3	1.1	.55	.21
5	1.5	1.1	1.5	2.9	1.6	2.0	2.3	1.6	1.9	1.1	.53	.14
6	3.3	1.3	1.5	1.9	1.5	1.3	2.0	1.6	10	1.1	.42	.11
7	4.3	2.9	1.5	1.7	1.4	1.3	1.9	1.6	2.2	3.5	.38	.11
8	4.2	1.7	2.0	1.6	1.3	1.1	2.2	2.5	1.6	2.0	1.2	.11
9	1.2	1.6	1.9	1.5	1.2	.91	2.5	2.8	1.2	1.2	.82	.11
10	.73	1.2	1.8	1.5	1.3	.91	2.3	1.3	.65	1.2	.35	.14
11	.65	1.2	1.8	1.4	1.7	11	2.6	1.1	.65	1.3	.31	.14
12	.57	1.1	1.8	1.2	1.6	5.6	2.2	1.1	.65	1.1	.29	.14
13	.58	1.1	1.8	1.0	1.4	16	2.6	1.1	.65	.98	.26	.17
14	.54	1.1	1.8	1.0	1.2	6.6	2.2	1.1	.65	.91	.26	1.5
15	.50	1.2	1.8	1.0	2.6	3.9	1.9	1.1	1.1	1.1	.26	3.1
16	.47	3.0	1.8	.90	4.2	3.5	1.9	1.1	1.8	1.1	.26	.46
17	.68	2.3	1.6	.90	2.2	14	3.7	1.2	4.7	.91	.26	.26
18	.97	2.3	1.6	.90	1.8	3.7	3.1	1.3	.91	1.6	.26	.26
19	.75	1.6	1.6	.90	1.8	3.3	1.8	4.4	.91	.98	.26	.26
20	.63	13	1.6	.90	1.5	2.8	1.9	2.2	.91	.92	1.1	.31
21	.55	2.8	1.6	.90	1.8	3.9	2.6	1.3	.77	.61	.47	.31
22	.55	3.2	1.6	.90	1.8	2.8	1.8	1.9	4.2	.70	.38	.31
23	1.8	2.7	11	.90	1.5	2.5	1.6	5.3	2.2	.76	.38	17
24	.96	2.2	3.0	.90	1.2	2.3	1.6	2.3	.65	.85	.32	1.2
25	.73	1.9	2.2	.80	1.3	2.3	1.6	1.5	.65	.94	1.4	.46
26	2.6	1.8	1.9	.80	1.3	3.7	1.8	1.2	1.9	.94	.77	.31
27	23	2.6	1.8	.80	1.5	2.3	1.8	1.2	.91	.97	.38	7.4
28	84	2.3	1.8	.80	1.6	1.9	1.5	1.6	.65	3.2	.46	.65
29	2.7	2.0	1.7	.80	---	1.9	1.5	1.5	32	.73	.21	.38
30	1.7	1.8	1.7	1.1	---	1.9	1.5	1.2	2.0	.46	.21	.38
31	1.5	---	1.7	1.3	---	4.1	---	3.7	---	.62	.17	---
TOTAL	146.49	66.1	64.8	43.00	50.8	113.62	63.6	56.2	86.11	36.48	14.87	36.70
MEAN	4.73	2.20	2.09	1.39	1.81	3.67	2.12	1.81	2.87	1.18	.48	1.22
MAX	84	13	11	7.0	4.2	16	3.7	5.3	32	3.5	1.4	17
MIN	.47	1.1	1.5	.80	1.2	.91	1.5	1.1	.65	.46	.17	.11
CFSM	1.63	.76	.72	.48	.62	1.27	.73	.62	.99	.41	.17	.42
IN.	1.88	.85	.83	.55	.65	1.46	.82	.72	1.10	.47	.19	.47

CAL YR 1981 TOTAL 650.25 MEAN 1.78 MAX 84 MIN .31 CFSM .61 IN 8.34
WTR YR 1982 TOTAL 778.77 MEAN 2.13 MAX 84 MIN .11 CFSM .73 IN 9.99

04246000 ONEIDA LAKE AT BREWERTON, NY

LOCATION.--Lat 43°14'25", long 76°08'30", Onondaga County, Hydrologic Unit 04140202, at west end of Oneida Lake, 100 ft (30 m) west of bridge on U.S. Highway 11, at Brewerton.

DRAINAGE AREA.--1,382 mi^2 (3,579 km^2), at dam at Caughdenoy.

PERIOD OF RECORD.--November 1951 to current year. April 1904 to September 1925 in reports of State Engineer and Surveyor, published as "Oneida River at Brewerton."

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (1.01 ft or 0.308 m, Barge Canal datum). November 1951 to September 1975, at datum 360.99 ft (110.030 m) higher.

REMARKS.--Elevation of lake surface regulated by taintor-gate dam on Oneida River at Caughdenoy and gates on Oneida Canal and Erie (Barge) Canal. Lake volume below 369 ft (112 m) elevation, 49,600 mil ft^3 (1,404 hm^3). Area of water surface, 79.8 mi^2 (207 km^2); axes, 20.9 mi (33.6 km) by 5.5 mi (8.8 km); shoreline length, 54.7 mi (88.0 km).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 372.83 ft (113.639 m) June 26, 1972; minimum daily, 366.41 ft (111.682 m) Feb. 18, 19, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1936, reached a stage of 373.5 ft (113.84 m) above mean sea level, from Corps of Engineers report "Flood Plain Information, Oneida Creek, New York."

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 371.72 ft (113.300 m) Oct. 30; minimum, 366.85 ft (111.816 m) Mar. 11.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369.51	371.46	369.40	367.77	367.30	367.07	369.73	369.91	370.11	369.92	369.65	369.40
2	369.38	371.30	369.21	367.74	367.30	367.04	370.00	369.80	370.09	369.88	369.69	369.36
3	369.41	371.18	369.12	367.78	367.29	367.01	370.19	369.68	370.19	369.78	369.69	369.30
4	369.47	371.03	369.07	367.79	367.30	367.01	370.32	369.60	370.23	369.63	369.72	369.33
5	369.59	370.91	368.97	367.73	367.35	366.98	370.52	369.64	370.11	369.53	369.65	369.40
6	369.52	370.68	368.75	367.95	367.37	366.97	370.57	369.65	369.99	369.44	369.65	369.39
7	369.46	370.54	368.85	367.96	367.40	366.96	370.48	369.66	369.96	369.43	369.62	369.40
8	369.83	370.57	368.76	368.03	367.40	366.96	370.41	369.67	369.89	369.46	369.63	369.40
9	369.99	370.43	368.65	368.02	367.41	366.95	370.36	369.67	369.77	369.47	369.63	369.40
10	370.01	370.37	368.61	368.01	367.41	366.94	370.25	369.76	369.73	369.50	369.61	369.40
11	370.00	370.16	368.54	367.97	367.40	366.92	370.19	369.83	369.67	369.57	369.61	369.40
12	369.92	370.06	368.47	367.93	367.37	366.92	370.11	369.90	369.70	369.46	369.61	369.42
13	369.83	369.96	368.39	367.90	367.35	366.99	369.98	369.86	369.70	369.47	369.59	369.44
14	369.73	369.82	368.40	367.83	367.34	367.11	369.94	369.89	369.62	369.50	369.55	369.43
15	369.62	369.70	368.27	367.81	367.32	367.31	370.00	369.90	369.67	369.51	369.52	369.42
16	369.42	369.65	368.02	367.79	367.28	367.52	370.00	369.92	369.61	369.52	369.51	369.39
17	369.37	369.69	368.14	367.75	367.28	367.77	370.00	369.93	369.68	369.52	369.45	369.42
18	369.31	369.61	368.06	367.71	367.29	367.97	370.14	369.98	369.75	369.53	369.45	369.36
19	369.09	369.64	368.01	367.67	367.28	368.15	370.63	369.96	369.75	369.58	369.43	369.41
20	369.31	369.79	367.95	367.62	367.27	368.32	370.72	369.90	369.65	369.60	369.35	369.51
21	369.37	369.58	367.91	367.58	367.25	368.50	370.64	369.89	369.74	369.61	369.34	369.42
22	369.43	369.62	367.86	367.54	367.23	368.67	370.68	370.00	369.78	369.60	369.31	369.44
23	369.46	369.67	367.84	367.54	367.22	368.85	370.66	370.16	369.75	369.60	369.31	369.43
24	369.53	369.66	367.89	367.49	367.19	369.01	370.63	370.04	369.77	369.62	369.27	369.50
25	369.73	369.61	367.93	367.46	367.17	369.14	370.55	369.91	369.77	369.61	369.28	369.57
26	369.79	369.68	367.95	367.43	367.14	369.30	370.50	369.94	369.77	369.58	369.33	369.60
27	369.95	369.41	367.98	367.40	367.12	369.43	370.37	369.95	369.75	369.60	369.35	369.73
28	370.50	369.28	367.92	367.36	367.08	369.49	370.30	370.00	369.74	369.64	369.27	369.73
29	371.22	369.29	367.85	367.31	---	369.51	370.20	369.99	369.83	369.63	369.32	369.80
30	371.59	369.33	367.84	367.29	---	369.51	370.06	370.05	369.90	369.72	369.39	369.84
31	371.60	---	367.87	367.28	---	369.54	---	370.08	---	369.67	369.35	---
MEAN	369.80	370.06	368.34	367.69	367.29	367.93	370.30	369.87	369.82	369.59	369.49	369.47
MAX	371.60	371.46	369.40	368.03	367.41	369.54	370.72	370.16	370.23	369.92	369.72	369.84
MIN	369.09	369.28	367.84	367.28	367.08	366.92	369.73	369.60	369.61	369.43	369.27	369.30

CAL YR 1981 MEAN 369.14 MAX 371.60 MIN 366.62
WTR YR 1982 MEAN 369.14 MAX 371.60 MIN 366.92

04246500 ONEIDA RIVER AT CAUGHDENOY, NY

LOCATION.--Lat 43°14'49", long 76°10'12", Oswego County, Hydrologic Unit 04140202, on left bank at point of diversion to New York State Erie (Barge) Canal, 1.6 mi (2.6 km) downstream from Oneida Lake, and 2.6 mi (4.2 km) upstream from navigation dam at Caughdenoy.

DRAINAGE AREA.--1,382 mi² (3,579 km²); 1902-9, 1,439 mi² (3,727 km²).

PERIOD OF RECORD.--September 1902 to December 1909 (published as "near Euclid"), January 1910 to December 1912, and October 1947 to current year in reports of Geological Survey. September 1902 to December 1909 and January 1910 to September 1925 in reports of State Engineer and Surveyor.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Base gage: Water-stage recorder. Datum of gage is 360.98 ft (110.027 m) National Geodetic Vertical Datum of 1929 (362.00 ft or 110.338 m Barge Canal datum). Prior to June 5, 1907, headwater readings, and June 5, 1907 to Dec. 31, 1909, nonrecording gage readings at former Oak Orchard State Dam 5.5 mi (8.8 km) downstream at different datum. Jan. 1, 1910 to Dec. 31, 1912, nonrecording gage at site 2.5 mi (4.0 km) downstream from present site at different datum. From Oct. 9, 1947 to Nov. 7, 1951, water-stage recorder at site 2.5 mi (4.0 km) downstream at present datum.

Auxiliary gage: Water-stage recorder at site 2.5 mi (4.0 km) downstream, 350 ft (107 m) upstream from navigation dam at present datum (base gage site 1947-51).

Supplementary gage: Water-stage recorder at site 2.6 mi (4.2 km) downstream, 180 ft (55 m) downstream from navigation dam at present datum.

REMARKS.--Records fair. Jan. 1, 1910 to Dec. 31, 1912: Flow over dam computed on basis of coefficient determined for model of dam of same general type; flow through gate and diversion through lock culverts estimated by theoretical calculations.

1947 to current year: Record represents total discharge at Caughdenoy, including flow in Oneida and Erie (Barge) Canals. Considerable seasonal regulation by operation of gates in Oneida and Erie (Barge) Canals with a large amount of natural storage in Oneida Lake. Occasional large diurnal fluctuations caused by seiche in Oneida Lake. Water may be diverted into or received from Mohawk River basin through summit level of Erie (Barge) Canal between New London and Utica. Nearly all of flow from 14 mi² (36 km²) of Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below lock 23, furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--45 years (water years 1903-12, 1948-82), 2,563 ft³/s (72.58 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,800 ft³/s (391 m³/s) Mar. 25-27, 1903; minimum daily, 52 ft³/s (1.47 m³/s) Oct. 24, 1910.

1947 to current year: Maximum daily discharge, 10,100 ft³/s (286 m³/s) June 25, 1972; minimum daily, 62 ft³/s (1.76 m³/s) July 29, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8,590 ft³/s (243 m³/s) Oct. 31; minimum daily, 193 ft³/s (5.47 m³/s) Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2690	8340	4830	2640	2010	1810	5520	5710	3650	2880	264	242
2	1910	8050	4590	2580	2020	1730	5940	5530	4100	3510	393	259
3	1490	7860	4450	2730	2010	1690	6290	5340	4190	4590	622	295
4	1490	7590	4380	2700	2030	1700	6480	3600	5060	4470	610	284
5	1880	7380	4220	2540	2090	1680	6830	2100	6000	4350	835	265
6	2420	7010	3880	2870	2110	1680	6930	1240	5830	2370	992	254
7	2390	6750	4100	2880	2150	1650	6750	818	5760	1010	1010	256
8	3920	6810	4030	2970	2150	1630	6630	793	5670	1020	1020	263
9	5160	6580	3840	2950	2160	1650	6570	810	5480	913	973	241
10	5440	6500	3790	2930	2160	1640	6390	800	3600	756	981	225
11	5440	6140	3690	2880	2150	1620	6300	804	1940	766	942	242
12	5340	5980	3590	2830	2130	1590	6160	821	1950	600	924	227
13	5380	5810	3480	2770	2100	1660	5950	842	2010	361	935	240
14	5440	5580	3500	2690	2090	1790	5870	837	1580	332	975	231
15	5240	5380	3310	2650	2070	2030	5920	840	876	353	962	210
16	4880	3690	2940	2620	2020	2320	5870	861	880	359	879	242
17	4850	2720	3130	2580	2020	2590	5860	853	862	346	776	241
18	4730	2700	3020	2540	2020	2790	6070	1190	849	309	790	205
19	2230	4210	2950	2470	2010	3000	6920	1770	852	277	766	226
20	959	5210	2850	2410	2000	3180	7050	1780	833	301	787	220
21	948	4940	2800	2350	1990	3610	6900	1780	821	306	762	193
22	918	4960	2750	2310	1950	3850	6980	1800	814	309	741	201
23	917	5040	2730	2330	1950	4150	6940	1880	1240	286	751	204
24	931	5040	2790	2260	1910	4390	6900	1860	1520	298	601	248
25	944	4990	2840	2230	1890	4590	6770	1830	1500	285	309	241
26	940	5090	2880	2190	1870	4810	6690	1810	1460	280	304	199
27	1950	4750	2920	2160	1840	5010	6480	1810	1460	260	282	235
28	5190	4610	2830	2100	1820	5130	6350	1820	1440	264	272	367
29	7860	4640	2740	2020	---	5180	6190	1820	1440	308	280	866
30	8560	4700	2730	2000	---	5200	5960	1840	2360	302	257	865
31	8590	---	2790	1990	---	5220	---	1860	---	273	256	---
TOTAL	111027	169050	105370	78170	56720	90570	192460	57449	76027	33044	21251	8487
MEAN	3582	5635	3399	2522	2026	2922	6415	1853	2534	1066	686	283
MAX	8590	8340	4830	2970	2160	5220	7050	5710	6000	4590	1020	866
MIN	917	2700	2730	1990	1820	1590	5520	793	814	260	256	193

CAL YR 1981 TOTAL 918542 MEAN 2517 MAX 8590 MIN 183
WTR YR 1982 TOTAL 999625 MEAN 2739 MAX 8590 MIN 193

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°27'06", long 76°30'20", Oswego County, Hydrologic Unit 04140203, on right bank at lock 7 in Oswego, 0.8 mi (1.3 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--5,100 mi² (13,209 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1900 to April 1906, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1307. Prior to January 1904, published as "above Minetto" or "near Minetto." January 1904 to April 1906, published as "at Battle Island." Records for April 1897 to September 1900, published in WSP 65 and for October 1927 to September 1928, published in WSP 644, have been found to be unreliable and should not be used.

REVISED RECORDS.--WDR NY 78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.00 ft (74.981 m) Barge Canal datum. Prior to 1933, nonrecording gage at site about 6 mi (10 km) upstream at different datum.

REMARKS.--Records good. Prior to 1933 and subsequent to 1972, flow in Oswego (Barge) Canal not included. A large amount of natural storage and some artificial regulation is afforded by the many large lakes and the Erie (Barge) and Oswego (Barge) Canal systems in the river basin. Large diurnal fluctuations at low and medium flow caused by powerplants upstream from station. Oswego River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. Water may be diverted into or received from Mohawk River basin through summit levels of Erie (Barge) Canal between New London and Utica. During part of year entire flow from 45.5 mi² (118 km²) of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Nearly all of flow from 14 mi² (36.3 km²) of the Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin.

COOPERATION.--Records of lockages at lock 7 furnished by New York State Department of Transportation, record of elevations of Lake Ontario by Corps of Engineers, daily discharge records for High Dam by Niagara Mohawk Power Corp.

AVERAGE DISCHARGE.--49 years (1933-1982), 6,712 ft³/s (190.1 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,500 ft³/s (1,060 m³/s) Mar. 28, 1936, includes daily mean discharge of canals; maximum gage height, 13.46 ft (4.103 m) Apr. 10, 1940; minimum discharge (river only), 30 ft³/s (0.85 m³/s) Nov. 6, 1944; minimum daily, 274 ft³/s (7.76 m³/s) Oct. 10, 1969; minimum gage height, 0.97 ft (0.296 m) Aug. 24, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 21,500 ft³/s (609 m³/s) Oct. 31; maximum gage height, 9.80 ft (2.987 m) Oct. 31; minimum daily discharge, 1,330 ft³/s (37.6 m³/s) Sept. 12; minimum gage height, 2.19 ft (0.668 m) Aug. 4, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7020	21400	13100	9140	4290	5440	16400	8310	4540	7080	1700	1510
2	5880	21000	12700	9050	4360	5280	16800	8050	7220	7450	2300	1400
3	5870	20300	11900	8570	4460	5010	16500	6880	8230	9210	3320	1790
4	5840	19600	11900	8880	5070	4370	16500	6280	7370	9290	1600	1680
5	5930	18800	11700	10100	5060	3580	16400	3300	7790	9230	1700	1460
6	7150	17800	11400	10600	5010	2800	16500	2200	9360	8030	2300	1430
7	7940	17600	11200	10500	5000	3440	16000	3100	11300	4400	2470	1570
8	8880	17500	11400	10100	5140	3660	15600	2400	12700	4830	3250	1540
9	12100	17100	11400	9340	5320	3560	15300	2200	13400	4870	2570	1390
10	12600	16800	11500	7980	5550	3730	15100	3700	12800	3800	2500	1550
11	11700	16000	11500	7580	5660	3470	15000	3600	8940	2600	2960	1550
12	11200	15400	11400	5020	5640	4280	14900	2200	8000	3400	2760	1330
13	11000	14800	11300	5350	5540	5440	15100	2500	6870	2400	2000	1390
14	10200	13700	11200	6160	5470	7130	14100	3500	7070	2200	2360	1680
15	9690	12300	11100	6450	5410	11800	13800	1800	6650	1800	2840	1450
16	9100	11700	10300	6370	5680	14800	14100	1900	5990	1900	2080	1680
17	8550	9680	9880	6170	5760	15800	13800	3400	6700	2600	2100	1700
18	8780	10200	10100	5900	5880	16900	13800	3700	6200	2500	2340	1380
19	7830	11200	9960	5740	6110	17600	14100	1600	5400	1600	1870	1490
20	5030	14700	9760	5220	7670	17900	14200	2600	5640	1400	2040	1520
21	3530	15800	9580	4860	7180	18400	13400	4220	5810	1800	2480	1400
22	3560	15900	9240	4870	7040	19500	12100	3100	5720	1900	2010	1640
23	3760	16100	8390	4840	7260	19800	10700	3610	5770	1600	1630	1490
24	3580	16100	9280	4760	6860	19300	10300	3500	5740	1800	2200	1950
25	3830	15400	10400	4640	6790	18800	10200	3500	5700	2000	1700	1870
26	3940	14900	10500	4580	6600	18300	9350	3740	4800	2000	1700	1510
27	6330	14600	10400	4130	5330	17300	8660	3500	4800	1900	1600	2290
28	14400	14100	10200	3330	5600	16600	8370	3300	3700	1700	1600	1960
29	20100	13600	9880	3910	---	15200	8440	3200	3700	1900	1600	2080
30	21000	13200	9570	4190	---	14400	8300	3300	5660	2100	1470	2180
31	21500	---	9250	4110	---	15100	---	3600	---	1900	1590	---
TOTAL	277820	467280	331390	202440	160740	348690	403820	111790	213570	111190	66640	48860
MEAN	8962	15580	10690	6530	5741	11250	13460	3606	7119	3587	2150	1629
MAX	21500	21400	13100	10600	7670	19800	16800	8310	13400	9290	3320	2290
MIN	3530	9680	8390	3330	4290	2800	8300	1600	3700	1400	1470	1330

CAL YR 1981 TOTAL 2433700 MEAN 6668 MAX 21500 MIN 896
WTR YR 1982 TOTAL 2744230 MEAN 7518 MAX 21500 MIN 1330

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1964-66, 1971 to current year.
CHEMICAL DATA: 1957 (a), 1958-60 (a) unpublished, 1964 (b), 1965 (c), 1966 (a), 1971-72 (a), 1974 (a), 1975 (c), 1976-81 (d), 1982 (c).
MINOR ELEMENTS DATA: 1971-1973 (a), 1975 (b), 1976 (a), 1977-82 (b).
ORGANIC DATA: OC--1975 (b), 1978-81 (d).
NUTRIENT DATA: 1971 (a), 1974 (a), 1975 (c), 1976-81 (d), 1982 (c).
BIOLOGICAL DATA:
Bacteria--1974 (a), 1975 (c), 1976-81 (d), 1982 (c).
Phytoplankton--1974 (a), 1975 (c), 1976 (d), 1977-81 (c).
Periphyton--1975-80 (a).
SEDIMENT DATA: 1974 (a), 1975 (c), 1976 (d), 1977 (b), 1978-79 (c), 1980-81 (d), 1982 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1975 to September 1981.
WATER TEMPERATURES: July 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1975-78, 1981): Maximum recorded, 2,290 micromhos Oct. 25,1980; minimum recorded, 430 micromhos Apr. 19, 1976.
WATER TEMPERATURES (water years 1975-78, 1981): Minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 to SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (FTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV 16...	1330	12500	790	7.7	7.0	8.3	755	12.8	107	450	K26	240
JAN 18...	1330	5980	900	7.2	.0	2.3	765	--	--	240	64	280
MAR 18...	1200	16900	596	7.3	.5	13	765	14.8	102	--	K1200	210
MAY 18...	1230	5100	1350	7.7	18.0	5.4	765	9.9	104	K990	120	340
JUL 12...	1200	4800	910	7.6	25.0	2.1	760	8.0	96	630	150	250
AUG 30...	1200	2460	1190	7.6	20.5	6.2	770	8.6	94	K1400	590	300

DATE	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV 16...	140	78	11	66	2.3	100	55	150	.1	1.1	484	424
JAN 18...	160	88	14	70	2.7	120	67	180	.1	2.1	591	496
MAR 18...	100	66	12	50	2.8	110	51	110	.1	3.1	405	361
MAY 18...	210	112	14	120	2.9	128	78	290	.2	--	919	694
JUL 12...	--	80	13	78	2.2	102	--	--	--	.2	--	--
AUG 30...	210	99	13	100	2.7	91	77	260	.2	2.3	818	609

K Results based on colony count outside the acceptable range (non-ideal colony count).

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 to SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
NOV 16...	.53	.080	.32	.060	<.010	.030	--	--	--	--	--	--
JAN 18...	1.0	.250	.66	.050	.040	.030	--	--	--	--	--	--
MAR 18...	1.2	.390	.93	.120	.050	.040	1	<1	<100	43	1	<1
MAY 18...	.64	.220	1.10	.090	.020	<.010	1	1	<100	58	1	1
JUL 12...	.39	.050	<.10	.080	.020	<.010	1	1	100	45	1	2
AUG 30...	.13	.240	1.20	.120	.020	<.010	1	1	100	100	1	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
JAN 18...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	10	<10	<1	<1	13	2	810	49	1	<1	60
MAY 18...	20	10	3	1	9	6	320	4	5	3	100
JUL 12...	10	<10	2	2	9	6	1000	5	5	2	50
AUG 30...	10	10	<1	<1	7	3	330	20	4	1	70

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 16...	--	--	--	--	--	--	--	--	--	--	--
JAN 18...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	35	.1	.1	3	3	<1	<1	<1	<1	10	6
MAY 18...	5	<.1	<.1	3	3	<1	<1	<1	<1	10	10
JUL 12...	3	.4	.2	4	<1	<1	<1	<1	<1	60	7
AUG 30...	<10	.1	<.1	5	4	<1	<1	<1	<1	30	10

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 to SEPTEMBER 1982

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK)	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
NOV					
16...	1335	30	3.0	787	7.5
16...	1340	100	3.0	789	7.5
16...	1345	160	3.0	790	7.0
16...	1350	220	3.0	792	7.0
16...	1355	300	3.0	794	7.0
JAN					
18...	1335	30	3.0	896	.0
18...	1340	100	3.0	900	.0
18...	1345	160	3.0	903	.0
18...	1350	220	3.0	863	.0
MAR					
18...	1005	30	3.0	609	.5
18...	1010	30	10.0	605	.5
18...	1015	100	3.0	601	.5
18...	1020	100	10.0	601	.5
18...	1025	160	3.0	595	.5
18...	1030	160	10.0	595	.5
18...	1035	220	3.0	592	.5
18...	1040	300	3.0	584	.5
MAY					
18...	1235	30	3.0	1350	18.0
18...	1240	30	10.0	1350	18.0
18...	1245	100	3.0	1350	18.0
18...	1250	100	10.0	1350	18.0
18...	1255	160	3.0	1350	18.0
18...	1300	160	10.0	1350	18.0
18...	1305	220	3.0	1350	18.0
JUL					
12...	1205	30	3.0	909	25.0
12...	1210	30	7.0	909	25.0
12...	1215	30	10.0	908	25.0
12...	1220	100	3.0	909	25.0
12...	1225	100	7.0	908	25.0
12...	1230	100	10.0	908	25.0
12...	1235	160	3.0	909	25.0
12...	1240	160	7.0	909	25.0
12...	1245	160	10.0	909	25.0
12...	1250	220	3.0	907	25.0
AUG					
30...	1205	30	3.0	1190	20.5
30...	1210	30	7.0	1190	20.5
30...	1215	100	3.0	1190	20.5
30...	1220	100	7.0	1190	20.5
30...	1225	160	3.0	1190	20.5
30...	1230	160	7.0	1190	20.5
30...	1235	220	3.0	1190	20.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
NOV							
16...	1330	12500	8	271	--	--	--
JAN							
18...	1330	5980	9	145	--	--	--
MAR							
18...	1200	16900	18	822	31	43	55
MAY							
18...	1230	5100	15	207	--	--	--
JUL							
12...	1200	4800	11	143	--	--	--
AUG							
30...	1200	2460	11	73	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV						
16...	--	--	--	--	--	--
JAN						
18...	--	--	--	--	--	--
MAR						
18...	61	66	78	89	96	100
MAY						
18...	--	--	--	--	--	--
JUL						
12...	--	--	--	--	--	--
AUG						
30...	--	--	--	--	--	--

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04221990 RUSHFORD LAKE AT CANEADEA DAM, NY.--Lat 42°22'49", long 78°11'00", Allegany County, Hydrologic Unit 04130002, at Caneadea Dam, 2.4 mi (3.9 km) upstream from Caneadea Creek mouth.

Lake is formed by Caneadea Dam completed in 1928 with capacity of 1,104,000 ft³ (31,625 m³) and is used for power generation (see station 04221991 for monthly mean discharges).

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY (see station for daily mean elevation, skeleton capacity table, montnly contents, and change in contents).

04227980 CONESUS LAKE NEAR LAKEVILLE, NY (see station for daily mean elevation).

04228845 HONEOYE LAKE NEAR HONEOYE, NY (see station for daily mean elevation).

04228950 CANADICE LAKE NEAR HEMLOCK, NY (see station 04229000 for observed and adjusted monthly mean discharges).

04232400 SENECA LAKE AT WATKINS GLEN, NY (see station for daily mean elevation).

04232450 KEUKA INLET (KEUKA LAKE) AT HAMMONDSPORT, NY (see station for daily mean elevation).

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY (see station for daily mean elevation).

04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY (see station for daily mean elevation).

04235396 OWASCO LAKE NEAR AUBURN, NY (see station for daily elevation).

04236000 SKANEATELES LAKE AT SKEATELES, NY (see station for daily elevation).

04238500 ONONDAGA RESERVOIR NEAR NEDROW, NY (see station for daily mean elevation, skeleton capacity table, montnly contents, and change in contents).

04240495 ONONDAGA LAKE AT LIVERPOOL, NY (see station for daily mean elevation).

04246000 ONEIDA LAKE AT BREWERTON, NY (see station for daily mean elevation).

04249010 LAKE ONTARIO AT OSWEGO, NY

LOCATION.--Lat 43°27'51", long 76°30'42" Oswego County, Hydrologic Unit 04150200, in southwest corner of Port of Oswego Authority building at mouth of Oswego River at Oswego.

DRAINAGE AREA.--295,800 mi² (766,100 km²).

PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.

GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (1955). Prior to Jan. 1, 1933, nonrecording gages.

COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Lake Survey Center, Detroit, Mich.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 248.96 ft (75.883 m) June 6, 1952; minimum observed, 240.94 ft (73.438 m) Dec. 23, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 245.97 ft (74.972 m) June 30, July 1; minimum, 243.43 ft (74.197 m) Jan. 23.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245.03	244.76	244.53	244.24	244.47	244.03	244.96	245.50	245.53	245.90	245.35	244.79
2	245.20	244.82	244.64	244.14	244.22	244.19	244.90	245.55	245.61	245.87	245.33	244.85
3	245.20	244.80	244.66	243.96	244.26	244.04	244.89	245.54	245.62	245.86	245.30	244.92
4	245.08	244.79	244.64	244.06	244.37	243.91	245.41	245.55	245.59	245.83	245.28	244.89
5	245.01	244.76	244.68	244.36	244.30	244.17	245.14	245.52	245.61	245.81	245.28	244.80
6	245.06	244.95	244.76	244.10	244.47	244.04	245.20	245.49	245.71	245.77	245.23	244.81
7	245.37	245.06	244.56	244.24	244.43	244.13	245.36	245.51	245.72	245.74	245.18	244.69
8	245.17	244.86	244.64	244.25	244.34	244.12	245.26	245.58	245.72	245.77	245.13	244.64
9	245.05	244.88	244.73	244.32	244.31	244.01	245.16	245.62	245.72	245.75	245.15	244.63
10	244.98	244.77	244.66	244.36	244.41	243.97	245.17	245.61	245.68	245.73	245.23	244.62
11	244.94	244.85	244.58	244.34	244.29	243.99	245.15	245.55	245.76	245.64	245.23	244.59
12	244.90	244.77	244.52	244.20	244.26	244.03	245.16	245.55	245.72	245.70	245.19	244.54
13	244.84	244.73	244.47	244.16	244.25	244.05	245.16	245.54	245.70	245.72	245.14	244.51
14	244.80	244.73	244.37	244.24	244.21	244.23	245.24	245.55	245.75	245.69	245.11	244.51
15	244.80	244.73	244.42	244.31	244.16	244.13	245.19	245.54	245.74	245.66	245.08	244.55
16	244.90	244.74	244.57	244.39	244.20	244.05	245.17	245.51	245.79	245.62	245.03	244.55
17	244.77	244.77	244.39	244.51	244.08	244.24	245.25	245.52	245.79	245.60	245.07	244.48
18	244.75	244.89	244.34	244.26	244.04	244.26	245.36	245.50	245.78	245.61	245.03	244.56
19	244.97	244.78	244.42	244.20	244.15	244.35	245.27	245.48	245.78	245.63	244.98	244.48
20	244.74	244.71	244.39	244.33	244.15	244.33	245.34	245.52	245.77	245.63	245.06	244.42
21	244.79	244.93	244.17	244.22	244.17	244.40	245.49	245.52	245.80	245.57	245.02	244.43
22	244.78	244.93	244.19	244.11	244.20	244.53	245.51	245.40	245.81	245.57	244.95	244.41
23	244.82	244.84	244.32	244.11	244.19	244.48	245.49	245.42	245.86	245.53	244.88	244.50
24	244.79	244.77	244.36	244.51	244.13	244.49	245.47	245.48	245.82	245.47	244.89	244.46
25	244.61	244.76	244.26	244.34	244.22	244.57	245.49	245.50	245.80	245.45	245.06	244.41
26	244.65	244.64	244.19	244.32	244.18	244.81	245.50	245.48	245.86	245.47	245.09	244.37
27	244.73	244.88	244.14	244.16	244.13	244.87	245.56	245.46	245.83	245.40	245.06	244.39
28	244.85	244.93	244.22	244.25	244.04	244.75	245.56	245.46	245.81	245.47	245.11	244.46
29	244.76	244.82	244.30	244.32	---	244.67	245.54	245.52	245.87	245.45	245.02	244.40
30	244.72	244.68	244.19	244.18	---	244.64	245.56	245.53	245.90	245.36	244.90	244.37
31	244.69	---	244.02	244.15	---	244.79	---	245.52	---	245.37	244.90	---
MEAN	244.90	244.81	244.43	244.25	244.24	244.30	245.30	245.52	245.75	245.63	245.11	244.57
MAX	245.37	245.06	244.76	244.51	244.47	244.87	245.56	245.62	245.90	245.90	245.35	244.92
MIN	244.61	244.64	244.02	243.96	244.04	243.91	244.89	245.40	245.53	245.36	244.88	244.37

CAL YR 1981 MEAN 244.86 MAX 245.72 MIN 243.52
WTR YR 1982 MEAN 244.90 MAX 245.90 MIN 243.91

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partialrecord station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1982

Station No.	Station name	Location	Drainage area (mi²)	Miles above mouth	Period of record	Measurements Date	Measurements Discharge (ft³/s)
		Allegheny River basin					
03013770	Pendergast Creek near Chautauqua	Lat 42°11'19", long 79°27'10", Chautauqua County, Hydrologic Unit 05010002, at bridge on State Highway 397, at State Fish Hatchery, 0.7 mi (1.1 km) upstream from mouth, and 1.1 mi (1.8 km) southeast of village limits of Chautauqua.	21.2	0.7	1952, 1967-68, 1978-80, 1982	8-12-82	*11.5
03013820	Bemus Creek at Bemus Point	Lat 42°09'14", long 79°22'57", Chautauqua County, Hydrologic Unit 05010002, at bridge on County Highway 126, at Bemus Point.	12.2	0.2	1952, 1967-68, 1978-80, 1982	8-12-82	*2.66

* Base flow.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1982

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	 Gage height (feet)	 Discharge (ft^3/s)
		Susquehanna River basin					
01496370	Mink Creek at Richfield Springs, NY	Lat 42°50'55", long 75°00'10", Otsego County, Hydrologic Unit 02050101, at bridge on State Highway 28, 0.4 mi (0.6 km) southwest of Richfield Springs, and 1 mi (1.6 km) upstream from mouth.	10.4	1969-82	4- 4-82	4.47	429
01497805	Little Elk Creek near Westford, NY	Lat 42°38'01", long 74°47'45", Otsego County, Hydrologic Unit 02050101, at culvert on Greenbush Road, 1.2 mi (1.9 km) south of Westford, and 2.2 mi (3.5 km) from mouth.	3.73	1978-82	10-28-81	15.99	76
01501015	Mill Brook at New Berlin, NY	Lat 42°37'32", long 75°19'43", Chenango County, Hydrologic Unit 02050101, at bridge on Academy Street at New Berlin, and 80 ft (24 m) upstream from mouth.	4.64	1975-80‡, 1981-82	2-12-82 3-17-82	ab2.70 2.47	- 376
01501140	Wharton Creek tributary near Edmeston, NY	Lat 42°42'35", long 75°13'19", Otsego County, Hydrologic Unit 02050101, at culvert on town road, 1.1 mi (1.8 km) upstream from mouth, and 1.4 mi (2.3 km) northeast of Edmeston.	2.02	1976-82	10-28-81	2.84	102
01502701	Susquehanna River at Afton, NY	Lat 42°13'38", long 75°31'27", Chenango County, Hydrologic Unit 02050101, on right bank at downstream side of bridge on State Highway 41, 0.1 mi (0.2 km) southeast of Afton and intersection of State Highways 7 and 41, and 0.2 mi (0.32 km) downstream from Kelsey Brook.	1,716	1972,77, 1979-82	10-29-81 1-10-82	10.37 b10.66	15,700 -
01502714	Ouaquaga Creek near Belden, NY	Lat 42°10'12", long 75°40'45", Broome County, Hydrologic Unit 02050101, at culvert on Kane Road, 2.3 mi (3.7 km) south of Belden, 2.8 mi (4.5 km) west of Harpursville, and 4.5 mi (7.2 km) upstream from mouth.	3.37	1975-82	2-28-81	2.31	133
01503960	Electric Light Stream near Morrisville, NY	Lat 42°52'51", long 75°38'37", Madison County, Hydrologic Unit 02050102, at bridge on Eaton-Morrisville Road, in Eagleville, 0.4 mi (0.6 km) upstream from mouth, and 1.3 mi (2.1 km) south of Morrisville.	7.21	1976-82	4- 1-82	9.86	242
01503980	Chenango River at Eaton, NY	Lat 42°51'02", long 75°36'21", Madison County, Hydrologic Unit 02050102, at bridge on Landon Road at Eaton, 0.1 mi (0.2 km) upstream from Eaton Brook, and 0.1 mi (0.2 km) downstream from State Highway 26.	24.3	1964-65, 1967-82	4- 1-82	7.17	769

‡ Operated as a continuous-record gaging station.
a Approximately.
b Ice jam.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Susquehanna River basin--Continued					
01505017	Cold Brook near North Norwich, NY	Lat 42°36'30", long 75°32'16", Chenango County, Hydrologic Unit 02050102, at culvert on town road, 0.4 mi (0.6 km) west of railroad tracks, 0.8 mi (1.3 km) southwest of North Norwich, and 1.8 mi (2.9 km) upstream from mouth.	5.80	1980-82	2- 4-82 4- 1-82	b21.22 20.18	- 124
01507000	Chenango River at Greene, NY	Lat 42°19'28", long 75°46'18", Chenango County, Hydrologic Unit 02050102, on left bank 1,700 ft (520 m) downstream from bridge on State Highway 206 at Greene, and 0.6 mi (1.0 km) downstream from Birdsall Creek.	593	1937-70*, 1971-82	4- 1-82	9.84	5,480
01508946	Otter Creek tributary at State Highway 222 near Cortland, NY	Lat 42°35'22", long 76°14'01", Cortland County, Hydrologic Unit 02050102, at culvert on State Highway 222, 1.0 mi (1.6 km) upstream from mouth, and 1.8 mi (2.9 km) west of Cortland.	2.85	1976-82	10-28-81	15.45	690
01511500	Tioughnioga River at Itaska, NY	Lat 42°17'53", long 75°54'33", Broome County, Hydrologic Unit 02050102, on right bank at Itaska, 3.8 mi (6.1 km) downstream from Otselic River and village of Whitney Point, and 6 mi (10 km) upstream from mouth.	730	1930-67*, 1968-82	10-28-81	9.46	15,100
01513500	Susquehanna River at Vestal, NY	Lat 42°05'27", long 76°03'23", Broome County, Hydrologic Unit 02050103, on left bank 400 ft (120 m) downstream from highway bridge at Vestal,and 800 ft (240 m) upstream from Choconut Creek.	3,941R	1936, 1937-67*, 1968-72, 1974-82	10-29-81	16.64	37,600
01513712	Nanticoke Creek tributary at Nanticoke, NY	Lat 42°16'40", long 76°02'51", Broome County, Hydrologic Unit 02050103, at culvert on Rabbit Road, 0.4 mi (0.6 km) northeast of Nanticoke, and 0.6 mi (1.0 km) upstream from mouth.	1.70	1975-82	10-28-81	3.15	165
01514000	Owego Creek near Owego, NY	Lat 42°07'45", long 76°16'15", Tioga County, Hydrologic Unit 02050103, on right bank of right channel 300 ft (91 m) upstream from bridge on State Highway 96, 0.5 mi (0.8 km) upstream from Catatonk Creek, and 1.5 mi (2.4 km) north of Owego.	185	1930-78*, 1979-82	10-28-81	8.15	6,410
01521596	Big Creek near Howard, NY	Lat 42°22'01", long 77°34'33", Steuben County, Hydrologic Unit 02050104, at culvert on town road, 0.1 mi (0.2 km) south of State Highway 70, 1.3 mi (2.1 km) north of Butch Corner, 3.4 mi (5.5 km) west of Howard, and 6.2 mi (10.0 km) upstream from mouth.	6.32R	1977-82	10-28-81	15.02	270
01525500	Canisteo River at West Cameron, NY	Lat 42°13'20", long 77°25'05", Steuben County, Hydrologic Unit 02050104, on right bank 250 ft (76 m) downstream from bridge on County Highway 119, 0.3 mi (0.5 km) southeast of West Cameron, and 1.7 mi (2.7 km) north of Cameron.	340	1930-31*, 1937-70*, 1971-72, 1974-82	10-28-81	15.98	13,200

* Operated as a continuous-record gaging station.
b Ice jam.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft³/s)
		Susquehanna River basin--Continued					
01527000	Cohocton River at Cohocton, NY	Lat 42°30'00", long 77°30'02", Steuben County, Hydrologic Unit 02050105, on left bank 450 ft (137 m) downstream from bridge on U.S. Highway 15 at Cohocton, 800 ft (244 m) downstream from small tributary, and 1.4 mi (2.3 km) upstream from Reynolds Creek.	52.2	1951-81*, 1982	3-26-82	4.58	324
		Allegheny River basin					
03010743	Johnson Creek near Franklinville, NY	Lat 42°22'37", long 78°26'37", Cattaraugus County, Hydrologic Unit 05010001, at culvert on Pigeon Hill Road, 0.2 mi (0.3 km) north of State Highway 98, 1.7 mi (2.7 km) upstream from mouth, and 2.5 mi (4.0 km) north of Franklinville.	5.25	1977-78, 1982	4- 1-82	<12.94	<47
03010800	Olean Creek near Olean, NY	Lat 42°07'12", long 78°25'12", Cattaraugus County, Hydrologic Unit 05010001, on right bank at upstream side of highway bridge, 1,000 ft (300 m) west of State Highway 16, 1.4 mi (2.3 km) northeast of Olean, and 4.6 mi (7.4 km) upstream from mouth.	198	1958-68*, 1969-82	4- 5-69 10-28-81	9.17 9.66	3,390 3,090
03011000	Great Valley Creek near Salamanca, NY	Lat 42°10'28", long 78°41'28", Cattaraugus County, Hydrologic Unit 05010001, at bridge on old State Highway 98, 275 ft (84 m) upstream from bridge on U. S. Highway 219, 1.5 mi (2.4 km) northeast of Salamanca, and 2.1 mi (3.4 km) upstream from mouth.	137	1951-68*, 1972, 1977-82	6-23-72 4- 1-82	Unknown 13.19	10,100 3,200
03013800	Ball Creek at Stow, NY	Lat 42°09'13", long 79°24'27", Chautauqua County, Hydrologic Unit 05010002, on left bank 75 ft (23 m) upstream from bridge on State Highway 394 at Stow, and 0.4 mi (0.6 km) upstream from mouth.	9.06	1955-64§, 1965, 1967-68#, 1974*, 1975-82	7-28-82	20.20	1,650
		Streams tributary to Lake Erie					
04213399	Walnut Creek tributary near Forestville. NY	Lat 42°28'12", long 79°08'07", Chautauqua County, Hydrologic Unit 04120101, at culvert on Quarry Road, 1.6 mi (2.6 km) east of Forestville and 2.3 mi (3.7 km) upstream from mouth.	1.02R	1979, 1981-82	1-31-82	12.90	107
04213490	South Branch Cattaraugus Creek near Otto, NY	Lat 42°21'54", long 78°48'04", Cattaraugus County, Hydrologic Unit 04120102, at highway bridge, 0.2 mi (0.3 km) upstream from Mansfield Creek, and 1.7 mi (2.7 km) northeast of Otto, and 5.5 mi (8.8 km) upstream from mouth.	25.1	1963-82	3-13-82	6.01	1,400
04214040	Delaware Creek near Angola, NY	Lat 42°37'46", long 79°03'15", Erie County, Hydrologic Unit 04120103, at bridge on State Highway 5, 1.5 mi (2.4 km) southwest of Angola, and 1.6 mi (2.6 km) upstream from mouth.	8.32R	1963-82	3-13-82	4.84	590

* Operated as a continuous-record gaging station.
§ Operated as a low-flow partial-record station.
# Miscellaneous measurements made.
R Revised.
< Less than.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft^3/s)
		Streams tributary to Lake Erie--Continued					
04214410	Hunter Creek at Colegrave, NY	Lat 42°44'11", long 78°32'55", Erie County, Hydrologic Unit 04120103, at bridge on Center Line Road, 0.3 mi (0.5 km) east of Colegrave, and 3.6 mi (5.8 km) upstream from mouth.	14.0	1964-82	3-13-82	5.00	730
		Streams tributary to Niagara River					
04216400	Tonawanda Creek near Johnsonburg, NY	Lat 42°43'05" long 78°19'20", Wyoming County, Hydrologic Unit 04120104, on State Highway 98 near Johnsonburg, and 0.6 mi (1.0 km) downstream from East Fork.	23.7R	1962-82	3-13-82	6.78	638
04216875	Little Tonawanda Creek Tributary near Batavia, NY	Lat 43°56'33", long 78°09'46", Genesee County, Hydrologic Unit 04120104, at culvert on Francis Road, 1.6 mi (2.6 km) upstream of mouth, and 2.9 mi (4.7 km) south of the city limits of Batavia.	1.02R	1976-82	3-13-82	13.07	108
04217700	Murder Creek at Pembroke, NY	Lat 42°59'37", long 78°26'08", Genesee County, Hydrologic Unit 04120104, at bridge on Lake Road, 0.3 mi (0.5 km) south of Pembroke, and 12.5 mi (20.1 km) west of Batavia.	43.6R	1962-72, 1974-82	3-13-82	9.34	1,730
04219645	Fourmile Creek near Youngstown, NY	Lat 43°13'49", long 79°01'01", Niagara County, Hydrologic Unit 04120104, at culvert on Balmer Road, 200 ft (61 m) east of State Highway 18, 1.5 mi (3.2 km) southeast of Youngstown, and 3.4 mi (5.5 km) above the mouth.	4.88	1970-73, 1976-80, 1982	3-14-82	8.07	189
		Streams tributary to Lake Ontario					
04219738	Eighteenmile Creek tributary near Lockport, NY	Lat 43°12'20", long 78°46'47", Niagara County, Hydrologic Unit 04130001, at culvert on Budd Road, 3.3 mi (5.3 km) northwest of Lockport and 4.1 mi (6.6 km) upstream from mouth.	2.53	1979-82	3-14-82	13.29	272
04219900	Johnson Creek near Lyndonville, NY	Lat 43°20'21", long 78°20'55", Orleans County, Hydrologic Unit 04130001, at bridge on Woodworth Road, 3.3 mi (5.3 km) downstream from dam at Lyndonville, and 4.4 mi (7.1 km) upstream from mouth.	87.7	1962-70, 1972-73, 1976-82	3-13-82	9.85	3,340
04219922	Oak Orchard Creek at Barrville Road near Elba, NY	Lat 43°05'42", long 78°08'43", Genesee County, Hydrologic Unit 04130001, at culvert on Barrville Road, 2.3 mi (3.7 km) northeast of Elba, and 6.0 mi (9.6 km) north of Batavia.	6.48R	1976-82	3-14-82	9.43	177
04221769	Black Creek at Hyder Flats Road at Black Creek, NY	Lat 42°16'03", long 78°13'38", Allegany County, Hydrologic Unit 04130002, at culvert on Hyder Flats Road, 0.6 mi (1.0 km) south of Black Creek, and 11.3 mi (18.2 km) upstream from mouth.	10.7R	1978-82	10-28-81	6.73	550
04222600	Wiscoy Creek at Bliss, NY	Lat 42°34'59", long 78°14'17", Wyoming County, Hydrologic Unit 04130002, at bridge on county road, 0.1 mi (0.2 km) north of State Highway 39, and 0.6 mi (1.0 km) east of Bliss.	22.0R	1962-65, 1967-82	3-31-82	2.60	†

R Revised.
† Discharge not determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft^3/s)
		Streams tributary to Lake Ontario--Continued					
04224700	Sugar Creek near Ossian, NY	Lat 42°30'52", long 77°48'14", Livingston County, Hydrologic Unit 04130002, on right bank 300 ft (91 m) downstream from bridge on Linzy Road, 1.3 mi (2.1 km) southwest of Ossian, and 5.6 mi (9.0 km) upstream from mouth.	10.0R	1964-73, 1975, 1977-82	6- 5-82	5.38	748
04224807	Stony Brook tributary at South Dansville, NY	Lat 42°28'16", long 77°40'21", Steuben County, Hydrologic Unit 04130002, at culvert on Willey Road, 0.6 mi (1.0 km) from mouth, and 0.9 mi (1.4 km) west of South Dansville.	3.15R	1977-82	10-28-81	9.91	160
04224900	Mill Creek at Patchinville, NY	Lat 42°31'13", long 77°35'06", Steuben County, Hydrologic Unit 04130002, at bridge on Ellinger Road, 0.1 mi (0.2 km) east of State Highway 21, 0.8 mi (1.3 km) south of Patchinville, 3.3 mi (5.3 km) south of Wayland, and 9.3 mi (15.0 km) upstream from mouth.	4.22R	1964-82	10-28-81	2.47	367
04231040	Hotel Creek at Griffin Road near Churchville, NY	Lat 43°03'36", long 77°52'28", Monroe County, Hydrologic Unit 04130003, at bridge on Griffin Road, 3.0 mi (4.8 km) upstream from mouth, and 3.1 mi (5.0 km) southeast of Churchville.	4.57	1976-82	3-14-82	12.45	69
042320527	Mill Creek tributary near Webster,NY	Lat 43°14'45", long 77°26'43", Monroe County, Hydrologic Unit 04140101, at culvert on Woodboro Farms Road, 400 ft (120 m) east of Holt Road, and 1.8 mi (2.9 km) north of Webster.	1.95R	1971-72, 1976-82	3-14-82	11.88	112
042320578	Bear Creek at Ontario, NY	Lat 43°13'30", long 77°17'00", Wayne County, Hydrologic Unit 04140101, at culvert on New Street in Ontario, 100 ft (30 m) west of Furnaceville Road, and 4.0 mi (6.4 km) upstream from mouth.	6.74	1971-73, 1975-82	12-23-81 3-14-82	11.77 11.96	82 73
04232071	Second Creek tributary at Alton, NY	Lat 43°12'36", long 76°59'32", Wayne County, Hydrologic Unit 04140101, at culvert on Bond Road, 200 ft (60 m) south of U.S. Highway 104, 0.3 mi (0.5 km) from mouth, and 0.6 mi (1.0 km) west of Alton.	1.07	1970, 1973, 1976-82	3-14-82	12.29	33
04232087	Red Creek tributary No. 16 near Red Creek, NY	Lat 43°13'36", long 76°42'23", Cayuga County, Hydrologic Unit 04140101, at culvert on town road (Red Creek Road), 1.3 mi (2.1 km) southeast of Red Creek.	2.90	1969, 1976-82	12-23-81	6.61	44
04232460	Sugar Creek at Guyanoga, NY	Lat 42°37'23", long 77°09'30", Yates County, Hydrologic Unit 04140201, at bridge on Sid White Road, 0.4 mi (0.6 km) east of Guyanoga, and 2.3 mi (3.7 km) upstream from mouth.	28.9	1966-82	6-17-82	4.59	427

R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
Streams tributary to Lake Ontario--Continued							
04232630	Kendig Creek near MacDougall, NY	Lat 42°50'57", long 76°53'33", Seneca County, Hydrologic Unit 04140201, at downstream side of bridge on County Highway 120, 3.0 mi (4.8 km) north of MacDougall, 3.5 mi (5.6 km) southwest of Waterloo, and 4.6 mi (7.4 km) upstream from mouth.	13.8	1965-68*, 1969-82	10-28-81	5.60	545
04233255	Cayuga Inlet at Ithaca, NY	Lat 42°25'38", long 76°31'19", Tompkins County, Hydrologic Unit 04140201, on upstream abutment face of flood-control weir, at east end of Burtt Place, south of Ithaca city line, 0.3 mi (0.5 km) east of State Highway 13a, 0.9 mi (1.4 km) downstream from Buttermilk Creek, and 2.4 mi (3.9 km) upstream from mouth.	86.7	1971-72, 1975-82	10-28-81	11.28	6,000
04233310	Sixmile Creek near Ithaca, NY	Lat 42°24'33", long 76°27'14", Tompkins County, Hydrologic Unit 04140201, at bridge on Burns Road, 1.8 mi (2.9 km) southeast of Ithaca, and 4.4 mi (7.1 km) upstream from mouth.	42.0	1967-69, 1971-73, 1976-82	10-28-81	10.90	7,600
04233676	Virgil Creek at Mill Street, Dryden, NY	Lat 42°29'18", long 76°18'08", Tompkins County, Hydrologic Unit 04140201,at bridge on Mill Street at Dryden, and 0.1 mi (0.2 km) upstream from Dryden Lake Outlet.	20.7	1966-70, 1972, 1975-82	10-27-81	8.38	4,670
04233700	Virgil Creek at Freeville, NY	Lat 42°30'18", long 76°21'01", Tompkins County, Hydrologic Unit 04140201, on left bank, 10 ft (3 m) upstream from bridge on Johnson Street in Freeville, and 0.7 mi (1.1 km) upstream from Fall Creek.	40.3	1974-75*, 1976-82	10-27-81	23.89	7,000
042340202	Cayuga Lake tributary No. 8 near Jacksonville, NY	Lat 42°32'24", long 76°35'35", Tompkins County, Hydrologic Unit 04140201, at culvert on State Highway 89 (Taughannock Buolevard), 0.1 mi (0.2 km) upstream from mouth, and 2.4 mi (3.9 km) northeast of Jacksonville.	1.36	1977-82	10-28-81	6.84	118
042340588	Yawger Creek tributary near Auburn, NY	Lat 42°54'41", long 76°39'46", Cayuga County, Hydrologic Unit 04140201, at culvert on Chamberlain Road, 3.5 mi (5.6 km) west of Auburn, and 4.3 mi (6.9 km) upstream from mouth.	1.76	1976-82	10-28-81 3-14-82	11.43 12.24	53 48
04234138	Schaeffer Creek near Canandaigua NY	Lat 42°54'25", long 72°22'14", Ontario County, Hydrologic Unit 04140201, at culvert on McCann Road, 0.8 mi (1.3 km) upstream from Mud Creek, 1.7 mi (2.7 km) north of U.S. Highway 20, and 3.2 mi (5.1 km) west of Canandaigua.	7.84	1980-82	3-14-82	12.31	288
04234200	Mud Creek at East Victor, NY	Lat 42°58'28", long 77°22'58, Ontario County, Hydrologic Unit 04140201, 25 ft (8 m) downstream from bridge on State Highway 96 at East Victor, 0.3 mi (0.5 km) upstream from Fish Creek, and 0.5 mi (0.8 km) upstream from mouth.	64.2	1958-68*, 1972, 1976-82	3-14-82	5.94	1,100

* Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft³/s)
Streams tributary to Lake Ontario--Continued							
04234363	Marbletown Creek tributary near Newark, NY	Lat 43°02'47", long 77°02'57", Wayne County, Hydrologic Unit 04140201, at culvert at intersection of Brumm and Sutton Roads, and 1.2 mi (1.9 km) east of Newark.	0.58	1976-82	3-14-82	4.71	22
04235255	Canandaigua Outlet tributary near Alloway, NY	Lat 43°00'21", long 77°00'54", Ontario County, Hydrologic Unit 04140201, at bridge on Pre-Emption Road, 0.5 mi (0.8 km) south of Wayne-Ontario County line, 1.8 mi (2.9 km) southwest of Alloway, and 2.9 mi (4.7 km) upstream from mouth.	2.94	1978-82	12-23-81 3-14-82	5.67 5.51	66 72
04235276	Black Brook at Tyre, NY	Lat 42°59'30", long 76°48'13", Seneca County, Hydrologic Unit 04140201, at bridge on County Highway 101, in village of Tyre, and 0.8 mi (1.3 km) upstream from mouth.	19.0	1966-73, 1975-82	10-28-81	2.96	265
04242795	Canada Creek tributary near Lee Center, NY	Lat 43°19'40", long 75°31'52", Oneida County, Hydrologic Unit 04140202, at culvert on Streum Road at Negro Road, 1.6 mi (2.6 km) upstream from mouth, 1.7 mi (2.7 km) northwest of Lee Center, and 7.6 mi (12.2 km) northwest of Rome.	1.34	1977-82	4-18-82	4.02	100
04245840	Scriba Creek near Constantia, NY	Lat 43°15'35" long 76°00'11", Oswego County, Hydrologic Unit 04140202, on right bank, 8 ft (2 m) upstream from road to Ingersol Road, and about 0.8 mi (1.3 km) north of village of Constantia.	38.4	1966-68*, 1969, 1971-82	3-31-82	6.90	1,140
04249050	Catfish Creek at New Haven, NY	Lat 43°29'00", long 76°19'34", Oswego County, Hydrologic Unit 04140102, at bridge on State Highway 104B, at New Haven, and 1.4 mi (2.3 km) upstream from mouth.	31.7	1962-66, 1968-82	10- 8-81	5.85	662

* Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1982

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Susquehanna River basin				
*01502701 Susquehanna River	Atlantic Ocean	Lat 42°13'38", long 75°31'27", Chenango County, Hydrologic Unit 02050101, at bridge on State Highway 41 at Afton.	1,716	1972, 1977, 1979-80.	10-29-82	14,500
01509015 Mosquito Creek	Trout Brook	Lat 42°37'10", long 76°05'25" Cortland County, Hydrologic Unit 02050102, at Highway bridge at water plant, 2.0 mi (3.2 km) north of McGraw.	3.8	1949	10-28-81	810
01512652 Chenango River	Susquehanna River	Lat 42°10'03", long 75°50'18", Broome County, Hydrologic Unit 02050102, at site 0.2 mi (0.3 km) downstream from Osborne Creek at Port Crane.			8- 3-82	492
01512660 Chenango River	Susquehanna River	Lat 42°09'38", long 75°51'06" Broome County, Hydrologic Unit 02050102, at site at end of Montague Street, 1.0 mi (1.6 km) west of Port Crane, and 1.0 mi (1.6 km) downstream from Osborne Creek.			7-20-82	881
01512680 Chenango River	Susquehanna River	Lat 42°09'55", long 76°52'15", Broome County, Hydrologic Unit 02050102, at site 0.15 mi (0.25 km) upstream from State Highway 12A bridge at Chenango Bridge.			8- 2-82 9-29-82	518 409
01512782 Chenango River	Susquehanna River	Lat 42°09'44", long 75°53'14", Broome County, Hydrologic Unit 02050102, at site at end of Merrill Road, 0.4 mi (0.6 km) upstream from Castle Creek at Hinmans Corners.			7-20-82	916
01512830 Chenango River	Susquehanna River	Lat 42°07'15", long 75°54'05", Broome County, Hydrologic Unit 02050102, at site 0.1 mi (o.2 km) upstream from Bevier Street bridge in Binghamton.			7-20-82 8- 2-82 9-29-82	934 517 426
		Streams tributary to Lake Ontario				
*04213399 Walnut Creek tributary	Lake Erie	Lat 42°28'12", long 79°08'07", Chautauqua County, Hydrologic Unit 04120101, at culvert on Quarry Road, 1.6 mi (2.6 km) east of Forestville and 2.3 mi (3.7 km) upstream from mouth.	1.02		9-22-82	3.88
*04233648 Fall Creek	Cayuga Lake	Lat 42°30'51", long 76°20'50", Tompkins County, Hydrologic Unit 04140201, at bridge on State Highway 38 at Freeville.	55.9	1965-68, 1973-74	10-28-81	4,470
04243794 Cowaselon Creek	Canaseraga Creek	Lat 43°06'04", long 75°46'45", Madison County, Hydrologic Unit 04140202, at site along Ditch Bank Road, 0.5 mi (0.8 km) downstream from Hardwood Island Road bridge, and 2.1 mi (3.4 km) northwest of Canastota.		1981	10-20-81 10-21-81	54.8 48.4
04243797 Cowaselon Creek	Canaseraga Creek	Lat 43°06'30", long 75°48'11", Madison County, Hydrologic Unit 04140202, at site along Ditch Bank Road, 1.5 mi (2.4 km) upstream from Gees Road bridge at Oniontown.		1981	10-19-81 10-20-81 10-21-81	67.6 60.9 52.0

* Also a crest-stage partial-record station.

Pony Hollow Creek seepage investigation

Two series of discharge measurements were made during the 1982 water year on June 10 and July 27, along Pony Hollow Creek and tributaries in the town of Newfield. The measurements were made during periods of baseflow to determine ground-water yield from the stratified drift within the valley, and to estimate aquifer properties. Tributary flow where streams enter areas of stratified drift is treated as a contribution, not a gain. Indicated gains and losses may be substantially in error as affected by small inaccuracies in open-channel discharge measurements and by possible unmeasured contributions from small tributaries.

Site number	Stream name	Distance from mouth (miles)	Measuring site	Meas. disch. (ft^3/s)	Gain or loss (ft^3/s)	Temp (°C)	Meas. disch. (ft^3/s)	Gain or loss (ft^3/s)	Temp (°C)
				June 10, 1982			July 27, 1982		
01515580	Carter Creek	0.48	1500 to 2800 ft upstream from Route 13, near ledges in channel	6.74	--	12.5	0.30	--	17.5
01515587	Pony Hollow Creek	3.51	120 ft upstream from Connecticut Hill Road	6.61	-0.13	12.5	dry	-0.30	--
01515587	Pony Hollow Creek tributary	.25	250 ft upstream from valley wall of Pony Hollow	Flowing	--	--	--	--	--
01515588	Pony Hollow Creek	2.76	About 200 ft downstream from Czech Hall on Route 13	7.54	+ .93	13.5	dry	--	--
01515589	Pony Hollow Creek	2.62	About 0.18 mi downstream from Czech Hall on Route 13	--	--	--	dry[a]	--	--
01515590	Chaffee Creek	1.25	200 ft upstream from valley wall of Pony Hollow, 25 ft downstream from last ledges in channel	4.09	--	14.5	.06	--	18.0
01515591	Chaffee Creek	.55	About 400 ft downstream from Czech Hall on Route 13	2.73	-1.36	13.0	dry	-.06	--
01515593	Chaffee Creek tributary	.28	200 ft upstream from valley wall of Pony Hollow, 200 ft downstream from last ledges in channel	--	--	--	--	-	--
01515594	Chaffee Creek tributary	.05	250 ft downstream from Route 13	2.44	--	14.0	pools	-	--
01515596	Pony Hollow Creek tributary No. 2	.22	300 ft upstream from valley wall of Pony Hollow	Flowing	--	--	--	--	--
01515598	Pony Hollow Creek	1.94	300 ft downstream from Route 13 bridge, 2000 ft northeast of junction of Route 13 and Cayuta Road	20.37	+7.66	13.0	2.99	+2.63	13.0
01515615	Pony Hollow Creek	.80	200 ft upstream from Morrel Road and 0.5 mi northeast of Cayuta	--	--	--	2.79	- .20	16.5

[a] Flow resumes 300 ft downstream and is 0.06 ft^3/s 800 ft downstream.

SUSQUEHANNA RIVER BASIN

NEAR ATHENS, PA

LOCATION.--Lat 41°55'31", long 76°31'35", Bradford County, Hydrologic Unit 02050105, at National Weather Service station "Milan 1N," 300 ft west of U.S. Highways 220 and 309, 0.6 mi (1.0 km) west of the mouth of the Chemung River, 2.0 mi (3.2 km) south of Athens, and 5.1 mi (8.2 km) south of the New York-Pennsylvania State line.

PERIOD OF RECORD.--October 1965 to October 1982 (monthly composite) discontinued.

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

CHEMICAL ANALYSES, OCTOBER 1981 TO OCTOBER 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/01 TO 81/11/01	4.3	.16	.07	.09	.04	2.30
81/11/01 TO 81/12/01	3.2	.20	.01	.09	.05	1.80
82/01/01 TO 82/02/01	1.3	1.20	.43	2.70	.50	15.00
82/02/01 TO 82/03/01	3.4	.23	.17	.17	.06	3.90
82/04/01 TO 82/05/02	.3	----	----	----	----	----
82/05/02 TO 82/06/02	5.2	.76	.16	.11	.06	7.93
82/06/02 TO 82/07/01	4.4	.27	.04	.05	.04	4.33
82/07/01 TO 82/08/01	3.1	.74	.13	.10	.13	7.99
82/08/01 TO 82/09/01	2.4	.98	.19	.13	.09	13.20
82/09/01 TO 82/10/01	2.9	.46	.13	.18	.25	4.79
82/10/01 TO 82/11/01	0.4	----	----	----	----	----

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)
81/10/01 TO 81/11/01	.86	.34	.94	.01	14	5.17
81/11/01 TO 81/12/01	.33	.51	1.20	.02	20	4.80
82/01/01 TO 82/02/01	1.50	1.90	5.30	.14	86	4.60
82/02/01 TO 82/03/01	.46	.88	2.20	.06	29	5.33
82/04/01 TO 82/05/02	----	----	----	----	115	6.34
82/05/02 TO 82/06/02	.36	.90	2.30	<.06	43	4.54
82/06/02 TO 82/07/01	.27	.62	1.60	<.06	34	4.43
82/07/01 TO 82/08/01	.26	.83	1.90	<.06	63	4.10
82/08/01 TO 82/09/01	.29	.96	2.40	<.06	94	3.92
82/09/01 TO 82/10/01	.29	.61	2.20	<.06	31	4.89
82/10/01 TO 82/11/01	----	----	----	----	84	6.24

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ALLEGHENY RIVER BASIN

AT ALLEGANY STATE PARK NY

LOCATION.--Lat 42°06'00", long 78°45'00", Cattaraugus County, Hydrologic Unit 05010001, at National Weather Service station "Allegany State Park," 100 ft (30 m) west of Park Administration Building, 300 ft (91 m) west of Park Highway 1, and 6.0 mi (9.7 km) south of Salamanca.

PERIOD OF RECORD.--October 1965 to November 1982 (monthly composite) discontinued.

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

CHEMICAL ANALYSES, OCTOBER 1981 TO NOVEMBER 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/01 TO 81/11/01	7.41	.22	.09	.07	.03	2.30
82/06/01 TO 82/07/09	6.94	.59	.24	.09	.20	4.06
82/07/09 TO 82/08/12	4.26	.34	.10	.06	.08	5.51
82/08/12 TO 82/09/09	1.95	.44	.13	.05	.09	5.07
82/09/09 TO 82/10/03	3.01	.45	.13	.20	.02	2.81
82/10/03 TO 82/11/09	5.19	.39	.11	.12	.01	3.26

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
81/10/01 TO 81/11/01	.40	.39	.12	.01	28	4.22
82/06/01 TO 82/07/09	.42	.31	.39	<.06	31	4.37
82/07/09 TO 82/08/12	.30	.40	.39	<.06	51	3.99
82/08/12 TO 82/09/09	<.20	.43	.47	<.06	43	4.10
82/09/09 TO 82/10/03	.33	.38	.18	<.06	30	4.27
82/10/03 TO 82/11/09	.36	.48	.085	<.06	35	4.20

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LAKE ONTARIO BASIN

AT MENDON PONDS

LOCATION.--Lat 43°01'17", long 77°35'01", Monroe County, Hydrologic Unit 04130003, in Mendon Ponds County Park, 200 ft (60m) east of rangers quarters, 300 ft (90 m) east of County Highway 65, 1.7 mi (2.8 km) south of Interstate Highway 90.

PERIOD OF RECORD.--June 1981 to October 1982 (monthly dustfall).
June 1981 to October 1982 (monthly composite).
June 1981 to November 1982 (storm event wetfall).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101 wet/dry precipitation collector. An automatic sensor detects occurances of precipitation, activating a motor which removes the cover from the wetfall collection vessel and covers the dustfall collection vessel. When the precipitation ceases, the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The openings of the collectors are approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation are obtained from an on-site recording weighing bucket gage.

DUSTFALL CHEMICAL ANALYSES, OCTOBER 1981 TO OCTOBER 1982

MONTHLY DUSTFALL

PERIOD OF COLLECTION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)	CHLORIDE (CL) (MG/L)
81/10/06 TO 81/11/03	1.60	.42	.16	.58	3.40	.29
81/11/03 TO 81/12/01	1.30	.34	.18	.08	3.40	.29
81/12/01 TO 82/01/05	1.60	.32	1.10	.05	3.60	1.10
82/01/05 TO 82/02/02	.95	.42	1.50	.07	2.20	1.50
82/02/02 TO 82/03/02	.72	.21	1.90	.04	2.50	1.40
82/03/02 TO 82/04/07	2.20	.33	.93	.06	5.00	.47
82/04/07 TO 82/05/04	2.40	.33	.34	.15	1.73	<.20
82/05/04 TO 82/06/01	2.00	.51	.12	.70	4.07	.22
82/07/06 TO 82/08/03	1.40	.20	.05	.24	1.96	<.20
82/08/03 TO 82/09/07	1.10	.24	.05	.10	1.72	.28
82/09/07 TO 82/10/05	1.40	.31	.17	.12	3.91	.37
82/10/05 TO 82/11/02	1.40	.21	.16	.13	2.73	.25

PERIOD OF COLLECTION	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/06 TO 81/11/03	.59	.18	.09	23	6.58
81/11/03 TO 81/12/01	.48	.25	.03	17	5.29
81/12/01 TO 82/01/05	1.10	.38	.01	26	5.28
82/01/05 TO 82/02/02	.68	.18	.03	25	4.86
82/02/02 TO 82/03/02	1.50	.18	.02	31	5.93
82/03/02 TO 82/04/07	.98	.21	.01	26	6.14
82/04/07 TO 82/05/04	.57	.05	<.06	21	6.89
82/05/04 TO 82/06/01	.64	.29	<.06	24	6.01
82/07/06 TO 82/08/03	.26	.09	<.06	13	6.28
82/08/03 TO 82/09/07	.16	.14	<.06	11	6.47
82/09/07 TO 82/10/05	.42	.15	<.06	16	5.60
82/10/05 TO 82/11/02	.43	.13	<.06	14	6.04

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CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT MENDON PONDS

BULK CHEMICAL ANALYSES, OCTOBER 1981 TO OCTOBER 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/06 TO 81/11/03	2.63	.48	.05	.07	.13	2.90
81/11/03 TO 81/12/02	3.41	.24	.01	.11	.05	3.80
81/12/02 TO 82/01/05	3.12	.48	.21	.32	.06	3.00
82/01/05 TO 82/02/02	2.01	----	----	----	----	2.60
82/02/02 TO 82/03/02	1.36	----	----	----	----	4.00
82/03/02 TO 82/04/07	2.58	.95	.06	.47	.08	6.30
82/04/07 TO 82/05/04	.29	----	----	----	----	----
82/05/04 TO 82/06/01	2.13	.92	.20	.11	.17	8.54
82/06/01 TO 82/07/06	3.72	.27	.06	.03	.13	4.61
82/07/06 TO 82/08/03	1.92	.82	.27	.04	1.70	7.19
82/08/03 TO 82/09/07	2.28	.61	.13	.05	.07	6.46
82/09/07 TO 82/10/05	1.94	.37	.07	.13	.04	5.09
82/10/05 TO 82/11/02	1.85	.57	.11	.09	.18	4.28

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO- (MHOS)	PH (UNITS)
81/10/06 TO 81/11/03	.36	.66	.90	.32	29	4.23
81/11/03 TO 81/12/02	.26	.52	.27	.02	37	4.17
81/12/02 TO 82/01/05	.68	.88	.41	.02	34	4.22
82/01/05 TO 82/02/02	1.10	.91	.30	.05	42	4.36
82/02/02 TO 82/03/02	.66	1.40	.45	.03	55	6.33
82/03/02 TO 82/04/07	.54	1.20	.70	<.01	61	4.02
82/04/07 TO 82/05/04	----	----	----	----	92	4.38
82/05/04 TO 82/06/01	.26	.84	1.10	<.06	57	4.07
82/06/01 TO 82/07/06	<.20	.44	.39	<.06	39	4.15
82/07/06 TO 82/08/03	.44	.41	2.90	.70	48	6.40
82/08/03 TO 82/09/07	<.20	.68	.70	<.06	52	4.06
82/09/07 TO 82/10/05	.24	.52	.64	<.06	35	4.24
82/10/05 TO 82/11/02	.27	.50	.40	<.06	30	4.33

CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT MENDON PONDS

WETFALL CHEMICAL ANALYSES, OCTOBER 1981 TO NOVEMBER 1982

STORM EVENT WETFALL

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/03 TO 81/10/27	2.16	.47	.04	.10	.24	2.90
81/10/27 TO 81/11/17	1.97	.28	.01	.16	.08	3.90
81/11/17 TO 81/12/10	2.71	.54	.17	.33	.07	3.30
81/12/23 TO 82/01/05	2.32	.58	.18	.18	.03	2.10
82/01/05 TO 82/02/02	2.01	.85	.32	1.20	.10	2.20
82/02/02 TO 82/03/17	2.79	.15	.04	.09	.01	----
82/03/17 TO 82/04/07	1.15	5.10	.84	1.60	.43	17.00
82/04/07 TO 82/05/08	1.24	1.70	.30	.33	.12	11.70
82/05/08 TO 82/06/06	3.03	.33	.02	.07	.03	2.38
82/06/13 TO 82/07/13	1.03	.20	.04	.07	.13	5.13
82/07/13 TO 82/07/28	1.79	.29	.03	.05	.03	3.46
82/07/28 TO 82/08/20	1.07	.34	.06	.03	.06	3.99
82/08/20 TO 82/08/25	1.08	.12	.01	.04	.03	5.36
82/09/07 TO 82/09/28	1.94	.27	.05	.12	.07	3.31
82/09/28 TO 82/11/02	1.85	.83	.16	.46	.08	7.63
82/11/02 TO 82/11/05	2.00	.05	.02	.03	.01	1.89

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/03 TO 81/10/27	.31	.47	.05	.09	29	4.24
81/10/27 TO 81/11/17	.33	.55	.25	.02	38	4.12
81/11/17 TO 81/12/10	.91	.75	.37	<.01	38	4.20
81/12/23 TO 82/01/05	.37	.76	.19	.03	22	4.47
82/01/05 TO 82/02/02	1.20	.60	.19	.04	26	4.20
82/02/02 TO 82/03/17	.16	.01	.01	----	2	5.48
82/03/17 TO 82/04/07	1.70	2.50	2.10	<.06	74	4.79
82/04/07 TO 82/05/08	.33	1.39	.86	<.06	92	3.85
82/05/08 TO 82/06/06	.29	.40	.22	<.06	29	4.28
82/06/13 TO 82/07/13	.27	.59	.58	<.06	58	3.95
82/07/13 TO 82/07/28	.23	.37	.24	<.06	35	4.17
82/07/28 TO 82/08/20	.26	.53	.46	<.06	41	4.16
82/08/20 TO 82/08/25	.31	.51	.40	<.06	59	3.90
82/09/07 TO 82/09/28	.35	.46	.25	<.06	35	4.16
82/09/28 TO 82/11/02	.42	1.10	.41	<.06	65	3.96
82/11/02 TO 82/11/05	.20	.25	.07	<.06	21	4.34

LAKE ONTARIO BASIN

AT MAYS POINT NY

LOCATION.--Lat 42°59'55", long 76°45'45", Wayne County, Hydrologic Unit 04140201, at National Weather Service station "Mays Point Lock 25," at Erie (Barge) Canal and State Highway 89, and 6.2 mi (10.0 km) south of Savannah.

PERIOD OF RECORD.--October 1965 to January 1982 (monthly composite) discontinued.

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

CHEMICAL ANALYSES, OCTOBER 1981 TO JANUARY 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/01 TO 81/11/01	5.05	.67	.03	.13	.10	1.60
81/11/01 TO 81/12/01	1.66	.60	.07	.31	1.30	3.60
81/12/01 TO 82/01/01	2.22	5.20	.08	.33	.38	3.30
82/01/01 TO 82/01/31	e 2.00	2.00	.36	.89	.98	4.30

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/01 TO 81/11/01	.34	.33	.56	.06	13	5.95
81/11/01 TO 81/12/01	.46	.51	.94	.22	25	6.55
81/12/01 TO 82/01/01	.64	.95	1.30	.36	40	7.06
82/01/01 TO 82/01/31	1.20	2.00	3.30	.54	56	6.75

e Estimated; average quantity for period from National Weather Service stations at Clyde and Cayuga.

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* The use of brand names in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

BROOME COUNTY

420646075531201. Local number, Bm 100.

LOCATION.--Lat 42°06'46", long 75°53'12", Hydrologic Unit 02050103, at Moeller and Frederick Streets, Binghamton. Owner: U.S. Geological Survey.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Water-level recorder on drilled observation well, diameter 6 in (0.15 m), depth 52 ft (15.8 m), cased to 52 ft m), slotted 40 ft (12.2 m) to 45 ft (13.7 m).

DATUM.--Land-surface datum is 851.05 ft (259.400 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter base, 2.86 ft (0.872 m) above land-surface datum.

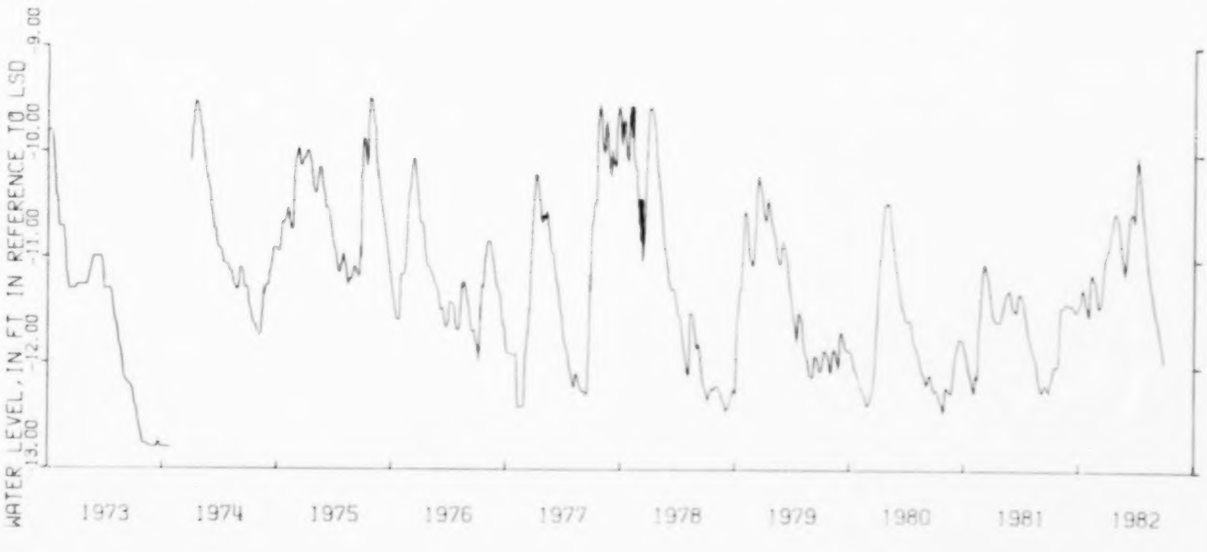
PERIOD OF RECORD.--October 1946 to July 1955, April 1966 to current year. Unpublished record for October 1946 to July 1955 (intermittent), April 1966 to April 1968 (intermittent) and May 1968 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.87 ft (2.70 m) below land-surface datum, July 3, 1972; lowest measured 12.83 ft (3.91 m) below land-surface datum, October 13, 1946.

EXTREMES FOR CURRENT YEAR.--Highest water level, 10.01 ft (3.05 m) below land-surface datum, July 3-5; lowest, 12.38 ft (3.71 m) below land-surface datum, Oct. 1.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OC	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.17	11.49	11.44	11.44	11.55	11.43	10.92	10.59	10.97	10.22	10.91	11.56
2	12.15	11.46	11.43	11.45	11.49	11.44	10.93	10.61	10.94	10.13	10.94	11.53
3	12.15	11.46	11.43	11.45	11.40	11.44	10.89	10.61	10.94	10.03	10.99	11.54
4	12.15	11.46	11.43	11.41	11.27	11.45	10.86	10.63	10.87	10.01	11.03	11.57
5	12.14	11.45	11.43	11.41	11.23	11.47	10.89	10.65	10.77	10.01	11.05	11.59
6	12.08	11.42	11.43	11.41	11.16	11.49	10.84	10.70	10.72	10.02	11.09	11.60
7	12.03	11.42	11.43	11.39	11.17	11.50	10.83	10.72	10.67	10.06	11.12	11.61
8	12.03	11.44	11.43	11.33	11.16	11.48	10.84	10.74	10.62	10.09	11.15	11.62
9	12.03	11.44	11.43	11.27	11.14	11.46	10.78	10.78	10.60	10.12	---	11.65
10	12.02	11.45	11.44	11.27	11.13	11.44	10.74	10.81	10.59	10.16	---	11.67
11	12.01	11.44	11.44	11.27	11.15	11.42	10.74	10.81	10.58	10.19	---	11.71
12	12.01	11.44	11.45	11.33	11.17	11.41	10.73	10.83	10.58	10.22	---	11.75
13	12.01	11.45	11.47	11.33	11.18	11.41	10.68	10.87	10.58	10.26	---	11.77
14	12.01	11.45	11.47	11.30	11.18	11.41	10.67	10.91	10.57	10.28	---	11.77
15	12.01	11.45	11.47	11.31	11.19	11.34	10.69	10.94	10.57	10.33	---	11.78
16	12.00	11.44	11.47	11.34	11.19	11.25	10.69	10.99	10.56	10.40	---	11.79
17	12.01	11.43	11.48	11.37	11.20	11.17	10.65	11.01	10.56	10.41	---	11.80
18	11.99	11.43	11.48	11.41	11.20	11.16	10.63	11.02	10.56	10.43	---	11.81
19	11.99	11.43	11.48	11.42	11.20	11.11	10.63	11.02	10.56	10.48	---	11.82
20	12.02	11.41	11.50	11.43	11.20	11.09	10.58	11.02	10.55	10.54	---	11.84
21	12.02	11.40	11.50	11.44	11.20	11.04	10.56	11.10	10.57	10.57	---	11.90
22	12.02	11.42	11.50	11.45	11.22	11.03	10.56	11.16	10.59	10.58	---	11.94
23	12.02	11.42	11.50	11.44	11.25	11.03	10.56	11.16	10.61	10.60	---	11.94
24	12.02	11.42	11.50	11.43	11.29	11.02	10.55	11.15	10.63	10.63	---	11.96
25	12.02	11.43	11.49	11.45	11.32	10.98	10.55	11.15	10.65	10.65	---	11.97
26	12.01	11.43	11.47	11.47	11.40	10.96	10.55	11.15	10.65	10.66	11.54	11.98
27	11.93	11.41	11.44	11.51	11.40	10.97	10.55	11.15	10.65	10.68	11.53	11.96
28	11.79	11.41	11.44	11.57	11.42	10.98	10.56	11.16	10.66	10.73	11.56	12.00
29	11.69	11.43	11.45	11.59	---	10.98	10.58	11.15	10.60	10.81	11.59	12.01
30	11.61	11.44	11.45	11.60	---	10.96	10.59	11.14	10.35	10.86	11.59	12.01
31	11.57	---	11.45	11.60	---	10.94	---	11.04	---	10.88	11.59	---



BROOME COUNTY

420657075583501. Local number, Bm 121.

LOCATION.--Lat 42°06'57", long 75°58'35", Hydrologic Unit 02050103, at Camden and Main Streets, Johnson City. Owner: U.S. Geological Survey.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Water-level recorder on drilled observation well, diameter 6 in (0.15 m), depth 53 ft (16.2 m), cased to 53 ft (16.2 m), open end.

DATUM.--Land-surface datum is 833.62 ft (254.087 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of shelter base, 3.42 ft (1.042 m) above land-surface datum.

REMARKS.--Well cleaned from 46 ft (14.0 m), to original depth on Oct. 19, 1970. Water level affected by floods of Susquehanna River, and by pumping from municipal well field 1,100 ft (335 m) south. Digital recorder installed Dec. 6, 1978.

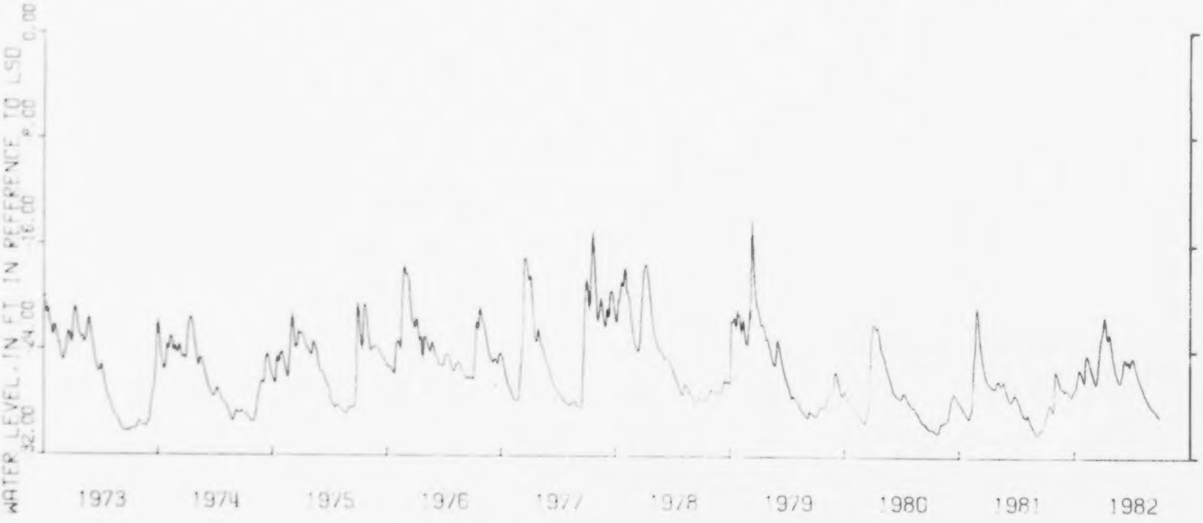
PERIOD OF RECORD.--March 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.73 ft (2.97 m) below land-surface datum, Apr. 8, 1956; lowest, 33.47 ft (10.20 m) below land-surface datum, Sept. 23, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level, 21.24 ft (6.47 m) below land-surface datum, Apr. 6; lowest 28.02 ft (8.82 m) below land-surface datum, Oct. 1.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.91	25.28	27.01	26.85	26.39	25.90	22.46	24.32	25.62	24.47	26.68	28.22
2	28.89	25.22	27.04	26.88	26.12	25.97	22.08	24.47	25.34	24.26	26.73	28.24
3	28.87	25.32	27.03	26.86	25.67	26.05	21.75	24.62	25.07	24.22	26.79	28.28
4	28.82	25.47	26.98	26.84	25.13	26.12	21.53	24.78	24.89	24.29	26.86	28.30
5	28.75	25.63	26.89	26.71	24.56	26.21	21.33	24.93	24.76	24.40	26.94	28.32
6	28.69	25.77	26.84	26.36	24.17	26.28	21.28	25.08	24.64	24.51	27.01	28.34
7	28.65	25.89	26.80	26.09	23.99	26.33	21.51	25.22	24.52	24.63	27.08	28.36
8	28.54	25.95	26.81	25.97	24.00	26.39	21.79	25.37	24.43	24.75	27.14	28.39
9	28.34	25.99	26.85	25.94	24.08	26.44	22.06	25.48	24.42	24.86	27.19	28.42
10	28.11	26.05	26.88	25.91	24.19	26.50	22.33	25.57	24.50	24.94	27.25	28.45
11	27.94	26.12	26.95	25.69	24.28	26.56	22.54	25.65	24.61	25.00	27.31	28.48
12	27.87	26.23	27.02	25.60	24.37	26.56	22.72	25.72	24.71	25.07	27.36	28.51
13	27.86	26.34	27.07	25.50	24.45	26.42	22.88	25.81	24.80	25.17	27.41	28.53
14	27.90	26.45	27.11	25.39	24.54	26.15	23.05	25.89	24.87	25.26	27.47	28.56
15	27.97	26.55	27.16	25.31	24.64	25.69	23.14	25.94	24.92	25.37	27.51	28.61
16	28.06	26.64	27.21	25.25	24.76	25.28	23.23	26.00	24.98	25.48	27.56	28.65
17	28.14	26.66	27.27	25.23	24.86	25.04	23.30	26.07	25.00	25.59	27.61	28.68
18	28.20	26.67	27.33	25.27	24.95	24.86	23.22	26.14	24.81	25.67	27.67	28.72
19	28.28	26.71	27.38	25.38	25.01	24.58	22.86	26.21	24.67	25.76	27.73	28.74
20	28.35	26.73	27.45	25.48	25.09	24.29	22.62	26.28	24.67	25.84	27.78	28.76
21	28.42	26.75	27.51	25.56	25.16	24.03	22.64	26.35	24.73	25.88	27.84	28.78
22	28.48	26.73	27.57	25.63	25.25	23.75	22.79	26.40	24.84	25.93	27.88	28.81
23	28.55	26.72	27.61	25.66	25.34	23.50	22.95	26.42	24.93	26.01	27.91	28.84
24	28.60	26.75	27.46	25.75	25.43	23.31	23.13	26.41	25.01	26.12	27.95	28.87
25	28.58	26.81	27.20	25.85	25.53	23.16	23.31	26.31	25.10	26.22	27.99	28.89
26	28.55	26.86	26.99	25.94	25.64	22.94	23.49	26.19	25.21	26.32	28.03	28.89
27	28.52	26.90	26.86	26.03	25.74	22.55	23.68	26.12	25.31	26.43	28.06	28.89
28	28.22	26.94	26.82	26.10	25.83	22.22	23.85	26.11	25.41	26.53	28.10	28.89
29	27.30	26.96	26.80	26.21	---	22.20	24.00	26.09	25.38	26.60	28.13	28.89
30	26.24	26.98	26.80	26.29	---	22.37	24.16	26.01	24.91	26.63	28.16	28.90
31	25.57	---	26.82	26.37	---	22.52	---	25.92	---	26.65	28.20	---



CATTARAUGUS COUNTY

420530078445201. Local number, Ct 121.

LOCATION.--Lat 42°05'30", long 78°44'52", Hydrologic Unit 05010001, near Red House.
Owner: State Department of Environmental Conservation.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in (0.15 m), depth 53 ft (16.2 m), cased to 53 ft (16.2 m), open end.

DATUM.--Land-surface datum is 1,467.08 ft (447.167 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.30 ft (0.091 m) above land-surface datum.

REMARKS.--Unusually low water levels experienced since July 4, 1969. (Lowest previous measurement was 13.23 ft or 4.03 m, Feb. 1, 1961). Extreme low levels occur during late summer and fall months, with lower than normal levels prevalent throughout the year. A source of nearby pumping has not been determined.

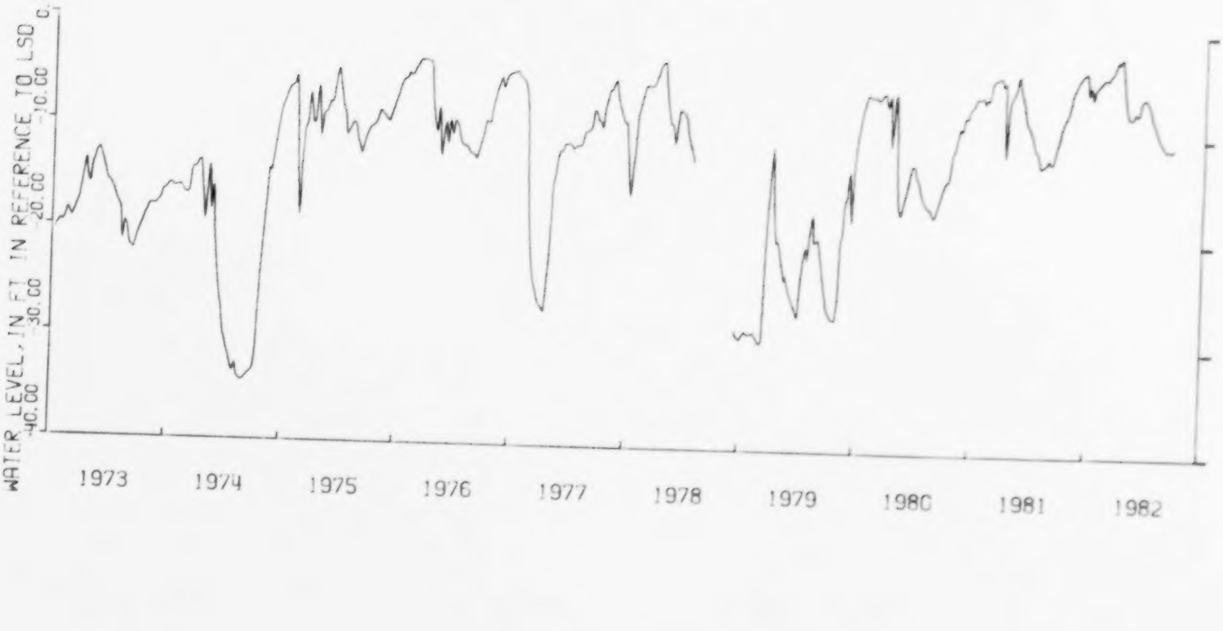
PERIOD OF RECORD.--September 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 2.12 ft (0.65 m) below land-surface datum, Apr. 8, 1982, lowest measured 34.87 ft (10.63 m) below land-surface datum, Nov. 21, 1972.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 2.12 ft (0.65 m) below land-surface datum, Apr. 8; lowest measured, 10.86 ft (3.31 m) below land-surface datum, Sept. 16.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1981	8.88	DEC 24, 1981	5.66	APR 08, 1982	2.12	JUL 15, 1982	7.91
08	8.30	31	4.89	15	4.54	22	8.57
15	7.84	JAN 07, 1982	6.08	22	6.59	30	9.21
22	7.46	14	5.08	29	7.82	AUG 06	9.90
29	6.58	21	4.89	MAY 13	7.85	13	10.18
NOV 05	5.54	FEB 11	4.17	20	7.26	20	10.55
13	5.12	18	4.16	30	7.55	27	10.78
19	4.56	25	4.21	JUN 03	7.36	SEP 03	10.78
26	4.27	MAR 05	3.66	10	6.20	16	10.86
DEC 06	3.79	11	3.53	21	5.90	20	10.66
12	3.71	25	2.40	28	6.05		
18	3.55	30	2.63	JUL 08	6.88		



GROUND-WATER LEVELS

CAYUGA COUNTY

424158076251901. Local number, Cy 7.

LOCATION.--Lat 42°41'58", long 76°25'19", Hydrologic Unit 04140201, near Moravia.
Owner: Earl Van Pelt.

AQUIFER.--Water-table aquifer in clayey gravel of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in (0.06 m), depth 28 ft (8.5 m), cased to 26 ft (7.9 m) 1.25-in (0.03-m) well point (60-gauze screen 26 ft or 7.9 m to 28 ft or 8.5 m).

DATUM.--Land-surface datum is 760.71 ft (231.865 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft (0.914 m) above land-surface datum.

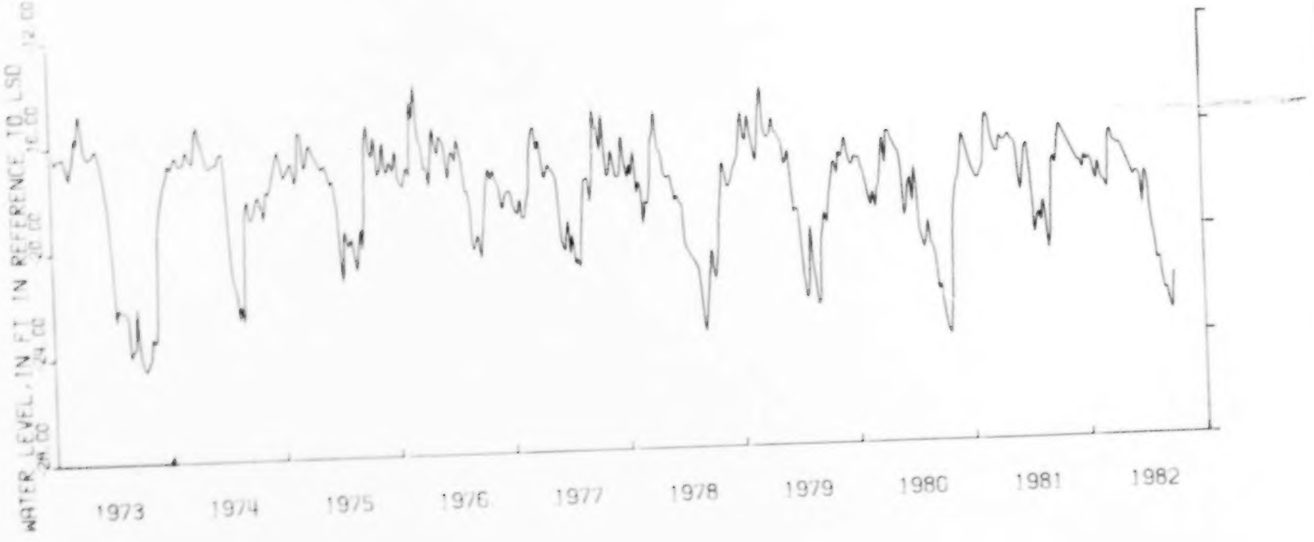
PERIOD OF RECORD.--December 1965 to current year. Unpublished record for December 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.91 ft (3.63 m) below land-surface datum, June 26, 1972; lowest measured, 24.53 ft (7.48 m) below land-surface datum, Oct. 20, 1973.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 16.21 (4.94 m) below land-surface datum, Oct. 12; lowest measured, 23.34 ft (7.11 m) below land-surface datum, Sept. 20.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1981	16.70	FEB 08, 1982	17.66	APR 27, 1982	17.23	AUG 02, 1982	20.58
12	16.21	16	18.28	MAY 31	18.25	09	21.44
DEC 07	17.61	22	18.36	JUN 03	18.16	16	21.34
14	17.62	MAR 01	18.46	07	18.[illegible]7	23	22.15
21	17.95	08	18.70	14	18.11	30	22.58
28	17.39	15	16.71	21	18.40	SEP 06	22.52
JAN 04, 1982	17.65	22	16.46	28	19.34	13	23.02
11	17.47	29	16.93	JUL 05	18.04	20	23.34
18	17.66	APR 05	16.94	12	18.38	27	21.96
25	18.09	12	17.04	19	19.52		
FEB 01	18.38	19	16.98	26	20.20		

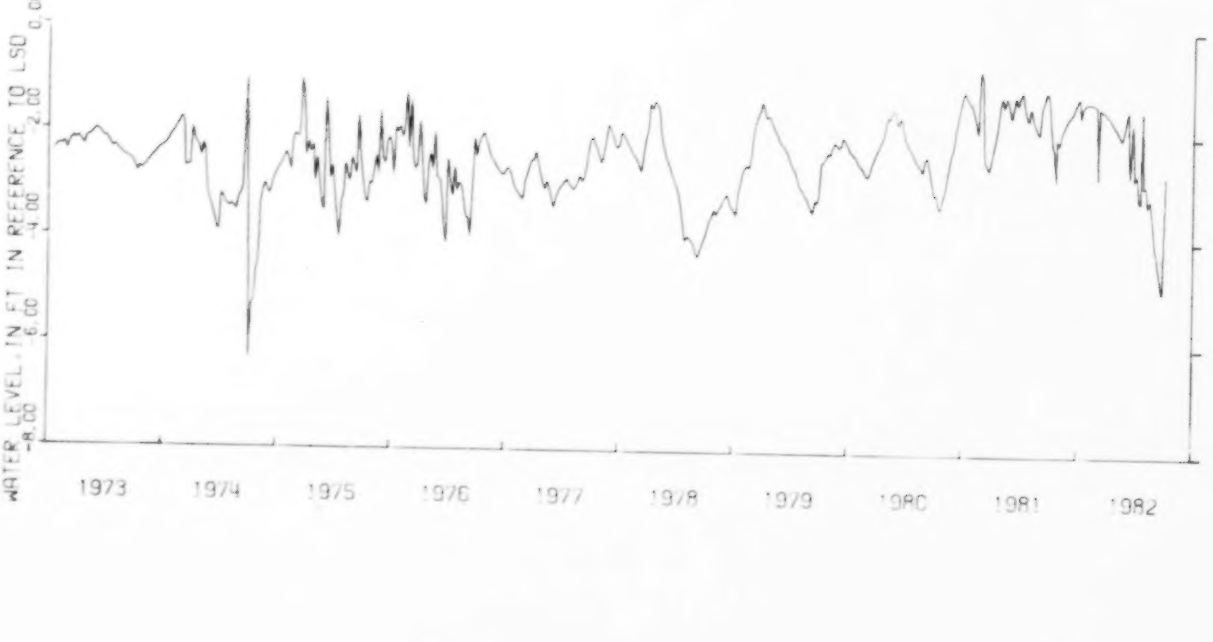


CHAUTAUQUA COUNTY

420326079295801. Local number, Cu 5.
LOCATION.--Lat 42°03'26", long 79°29'58", Hydrologic Unit 05010002, near Panama.
Owner: State Department of Environmental Conservation.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 36 in (0.91 m), depth 33 ft (10.1 m), stone-lined.
DATUM.--Altitude of land-surface datum is 1,750 ft (533 m), from topographic map. Measuring point: Top of 0.25-in (0.006-m) steel-plate well cover, inside shelter door, 0.44 ft (0.134 m) below land-surface datum.
PERIOD OF RECORD.--May 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.70 ft (0.21 m) below land-surface datum, Feb. 19, 1981; lowest measured 9.41 ft (2.87 m) below land-surface datum, May 24, 1949.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 1.20 ft (0.37 m) below land-surface datum, Dec. 29; lowest measured, 4.90 ft (1.49 m) below land-surface datum, Sept. 21.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	2.10	JAN 07, 1982	1.40	APR 15, 1982	1.70	JUL 15, 1982	3.20
13	2.20	14	1.35	22	1.75	20	1.46
19	2.79	21	1.30	29	1.80	22	2.90
20	2.00	28	1.30	MAY 06	1.90	29	2.85
27	2.10	FEB 04	1.30	13	2.00	AUG 04	3.13
NOV 03	1.90	11	1.30	20	1.85	05	3.27
10	1.80	18	1.35	27	1.65	12	3.12
17	1.70	25	1.35	JUN 03	1.45	19	3.42
24	1.60	MAR 02	2.75	10	2.70	26	4.00
DEC 01	1.55	04	1.40	11	2.66	SEP 02	4.20
08	1.50	11	1.45	17	1.70	09	4.48
15	1.40	18	1.45	22	2.40	16	4.70
22	1.30	25	1.50	24	2.76	21	4.90
29	1.20	APR 01	1.55	JUL 01	2.65	23	4.85
JAN 05, 1982	1.59	08	1.60	08	3.15	30	2.70

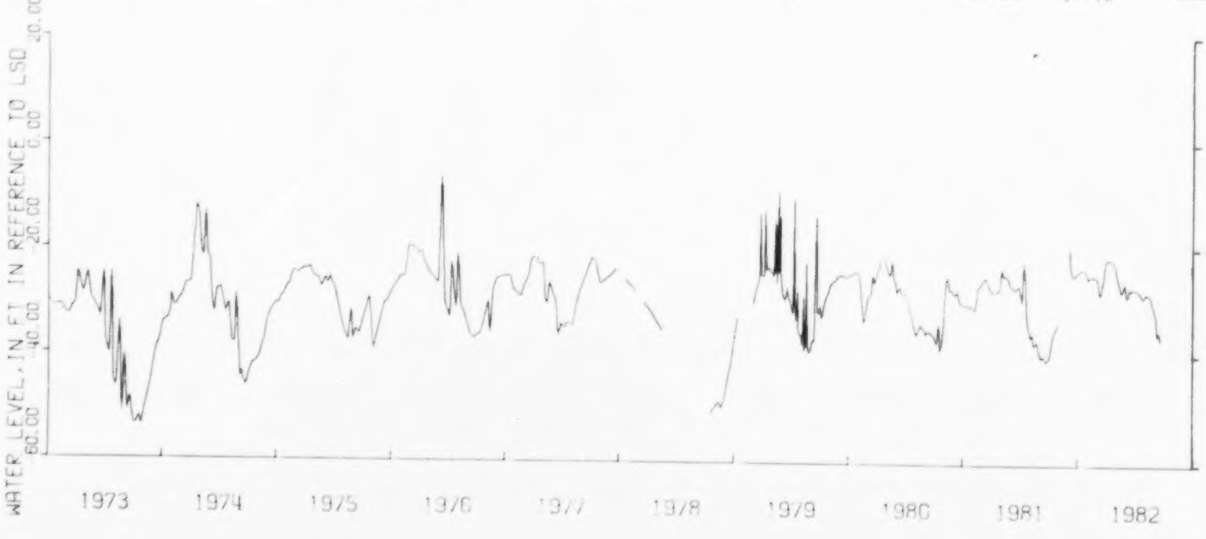


CHAUTAUQUA COUNTY

420815079121401. Local number, Cu 10.
LOCATION.--Lat 42°08'15", long 79°12'14", Hydrologic Unit 05010002, at Falconer.
Owner: City of Jamestown.
AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 12 in (0.30 m) to 10 in (0.25 m), depth 232 ft (70.7 m), filled in from original depth of 240 ft (73.2 m), cased 12-in (0.30 m) 0 ft (0.0 m) to 130 ft (39.6 m) 10 in (0.25 m) 130 ft (39.6 m) to 240 ft (73.2 m), slotted 130 ft (39.6 m) to 144 ft (43.9 m), open end.
DATUM.--Altitude of land-surface datum is 1,250 ft (381 m), from topographic map. Measuring point: Top of shelter base, 5.44 ft (1.658 m) above land-surface datum.
REMARKS.--Water level affected by pumping (average 5 Mgal/d or 18,900 m^3/d in 1977) from municipal well field. Digital recorder installed Dec. 18, 1978, removed Sept. 16, 1982.
PERIOD OF RECORD.--November 1939 to September 1943, August 1946 to current year. Unpublished record for November 1939 to September 1943, August 1946 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.2 ft (1.6 m) above land-surface datum, Mar. 14, 1942; lowest, 66.6 ft (20.3 m) below land-surface datum, Nov. 3, 1971.
EXTREMES FOR CURRENT YEAR.--Highest water level, 7.39 ft (2.25 m) below land-surface datum, Dec. 3; lowest, 39.70 ft (12.10 m), Oct. 1.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.43	31.63	18.30	23.42	24.87	24.66	20.95	23.85	28.22	26.83	27.43	31.81
2	38.85	31.49	17.82	23.42	24.58	25.13	21.08	24.06	28.18	26.89	27.36	32.07
3	38.32	31.42	16.74	23.35	24.23	27.26	21.11	24.38	28.17	26.96	27.45	32.44
4	37.74	---	21.16	23.22	24.13	26.88	21.05	25.38	28.35	26.98	27.55	35.69
5	37.29	---	22.35	23.08	24.05	27.10	21.11	25.29	28.23	27.02	27.69	35.50
6	36.86	---	22.47	23.06	24.00	27.22	21.09	25.43	27.74	27.15	27.85	34.01
7	36.12	---	23.58	23.08	23.99	27.23	21.15	25.79	27.42	27.19	27.98	34.05
8	35.97	---	23.85	23.39	23.99	27.34	21.19	25.93	27.26	27.33	28.05	34.67
9	35.82	---	24.02	23.00	24.02	27.65	21.17	26.07	27.12	27.20	27.86	34.82
10	35.43	---	24.02	22.86	24.10	27.82	21.19	26.21	26.61	27.15	27.70	34.84
11	34.98	---	24.02	22.76	24.24	27.78	21.16	26.41	26.88	27.24	27.64	35.41
12	34.82	---	24.14	22.83	24.26	27.56	21.19	26.64	26.88	27.26	27.70	35.42
13	34.80	---	24.23	22.91	24.34	27.14	21.16	26.85	26.87	27.24	27.83	35.53
14	34.73	---	24.20	22.84	24.42	26.59	21.15	27.10	26.89	27.32	27.97	35.95
15	34.74	---	24.28	22.92	24.44	26.08	21.21	27.34	26.98	27.49	28.11	36.31
16	34.71	---	24.37	22.94	24.45	25.91	21.31	27.51	27.03	27.81	28.33	36.18
17	34.74	---	24.42	23.01	24.31	25.60	21.46	27.72	26.82	28.03	28.67	36.71
18	34.67	---	24.46	23.07	24.31	25.29	21.48	28.03	26.73	28.09	29.01	---
19	34.67	---	24.41	23.19	24.31	25.14	21.52	25.27	26.60	28.14	29.28	---
20	34.21	---	24.19	23.24	24.29	24.99	21.60	26.94	26.45	28.08	29.49	---
21	34.14	---	24.19	23.24	24.22	24.65	21.74	28.08	27.09	28.00	29.62	---
22	34.06	---	24.19	23.24	24.27	25.03	21.91	28.44	29.38	27.93	29.68	---
23	34.09	---	23.96	23.60	24.32	23.13	22.31	28.52	27.05	28.00	29.83	---
24	33.95	---	23.72	24.04	24.38	22.07	22.26	28.49	26.66	28.15	30.04	38.33
25	33.62	---	23.55	24.04	24.46	21.92	22.34	25.50	26.72	28.28	30.23	---
26	33.27	---	23.47	24.04	24.55	21.81	22.48	28.00	26.86	28.72	30.42	---
27	33.03	---	23.42	24.43	24.63	21.84	22.83	28.58	26.93	29.07	30.70	---
28	32.57	---	23.49	25.15	24.64	21.83	23.20	28.80	27.03	28.77	30.88	---
29	32.38	---	23.52	25.45	---	21.82	23.42	28.77	26.98	28.18	31.05	---
30	32.16	---	23.60	25.53	---	21.75	23.60	28.58	26.89	27.87	31.23	---
31	31.90	---	23.53	25.28	---	21.40	---	28.34	---	27.60	31.52	---

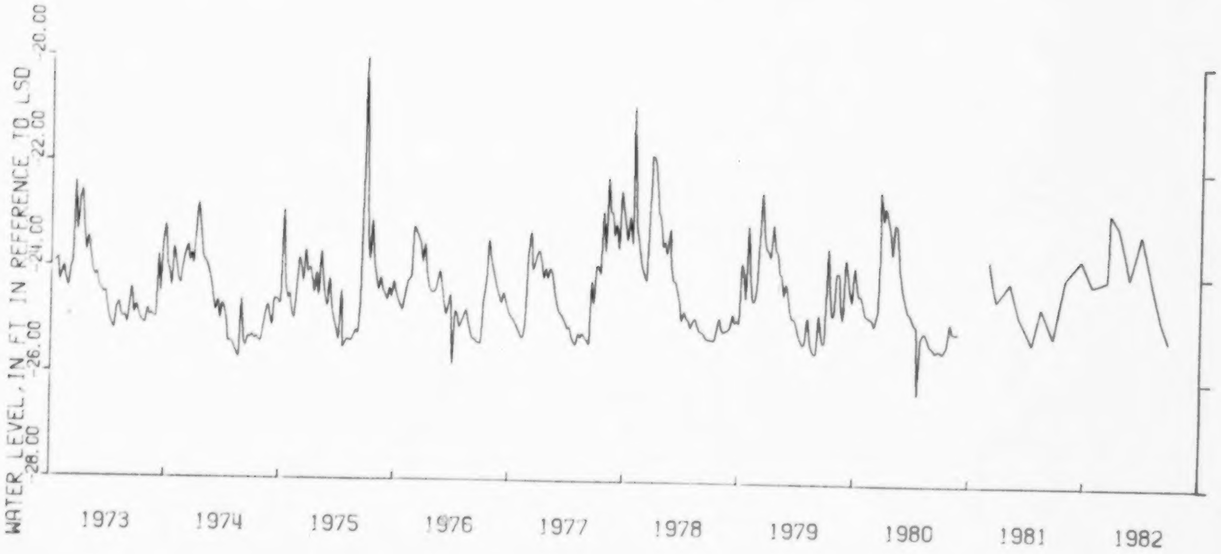


CHEMUNG COUNTY

420829076484801. Local number, Cm 46.
LOCATION.--Lat 42°08'29", long 76°48'48", Hydrologic Unit 02050105, near Horseheads.
Owner: Milton A. Roy.
AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in (0.15 m), depth 34 ft (10.4 m), cased to 34 ft (10.4 m), open end.
DATUM.--Land-surface datum is 885.78 ft (269.99 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of instrument shelf mounted on flange union at top of casing, 3.42 ft (1.04 m) above land-surface datum.
REMARKS.--Water level affected by floods of Newtown Creek.
PERIOD OF RECORD.--October 1955 to current year. Unpublished record for October 1955 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.93 ft (5.77 m) below land-surface datum, April 25, 1961; lowest measured, 26.30 ft (8.02 m) below land-surface datum, July 18, 1980.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 22.81 ft (6.95 m) below land-surface datum, Mar. 17; lowest measured, 25.23 ft (7.69 m) below land-surface datum, Sept. 20.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

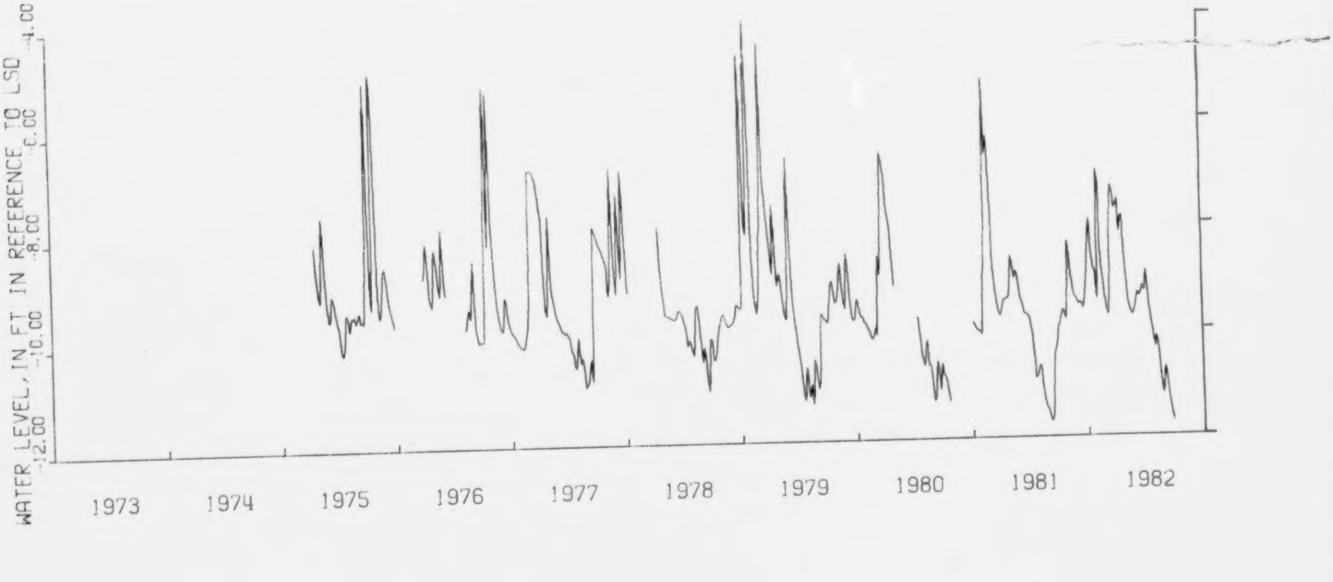
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1981	24.05	MAR 09, 1982	24.08	MAY 19, 1982	24.04	AUG 27, 1982	24.84
DEC 14	23.69	17	22.81	JUN 22	23.20	SEP 20	25.23
JAN 21, 1982	24.18	APR 12	23.07	JUL 29	24.15		



421556075281602. Local number, Cn 12.
LOCATION.--Lat 42°15'56", long 75°28'16", Hydrologic Unit 02050101, 400 ft (120 m) south of intersection of County Highways 39 and 12, 0.5 mi (0.8 km) east of Susquehanna River, and 2.0 mi (3.2 km) south of Bainbridge. Owner: Ilse Maehlman.
AQUIFER.--Water-table aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Water-level recorder on drilled observation well, diameter 6 in (0.15 m), depth 13 ft (4.0 m), cased to 13 ft (4.0 m) gravel-packed, open end.
DATUM.--Land-surface datum is 979.28 ft (298.484 m) National Geodetic Vertical Datum of 1929. Measuring point: File mark at top of shelter base, 1.37 ft (0.418 m) above land-surface datum.
REMARKS.--This well drilled April 1974 as a replacement for 421556075281601 (local number Cn 11), located 90 ft (27.4 m) north, which has a period of record from October 1965 to September 1972 (unpublished).
PERIOD OF RECORD.--April 1975 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.79 ft (0.85 m) below land-surface datum, Mar. 7, 1979; lowest, 11.81 ft (3.60 m) below land-surface datum, Sept. 26-29, 1982.
EXTREMES FOR CURRENT YEAR.--Highest water level, 6.56 ft (2.00 m) below land-surface datum, Feb. 7; lowest, 11.81 ft (3.60 m) below land-surface datum, Sept. 26-29.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.94	8.33	9.48	---	9.44	9.54	7.73	8.80	9.58	9.30	10.35	10.72
2	9.93	8.30	9.49	---	9.12	9.58	7.81	8.92	9.56	9.15	10.30	10.75
3	9.92	8.33	9.51	---	8.76	9.61	7.82	9.02	9.52	8.98	10.24	10.81
4	9.91	8.39	9.52	---	7.72	9.65	7.79	9.11	9.48	8.91	10.19	10.87
5	9.88	8.49	9.52	---	6.99	9.68	7.68	9.19	9.45	8.90	10.15	10.94
6	9.85	8.60	9.52	8.85	6.68	9.70	7.51	9.27	9.41	8.94	10.13	11.00
7	9.82	8.72	9.51	8.30	6.57	9.71	7.40	9.35	9.38	9.00	10.12	11.07
8	9.80	8.82	9.50	7.97	6.65	9.72	7.38	9.41	9.35	9.07	10.13	11.12
9	9.76	8.91	9.49	7.89	6.90	9.73	7.43	9.46	9.33	9.14	10.19	11.17
10	9.72	8.98	9.49	7.91	7.26	9.74	7.54	9.51	9.32	9.21	10.27	11.22
11	9.68	9.03	9.49	8.04	7.66	9.75	7.68	9.55	9.32	9.30	10.38	11.27
12	9.66	9.07	9.49	8.24	8.06	9.73	7.83	9.57	9.33	9.38	10.47	11.32
13	9.63	9.11	9.50	8.38	8.41	9.51	7.97	9.59	9.35	9.44	10.56	11.37
14	9.62	9.14	9.51	8.48	8.65	8.89	8.09	9.61	9.37	9.50	10.63	11.41
15	9.62	9.18	9.52	8.55	8.82	8.24	8.18	9.62	9.40	9.54	10.71	11.45
16	9.62	9.21	9.54	8.62	8.91	7.87	8.23	9.64	9.42	9.59	10.78	11.49
17	9.64	9.26	9.56	8.68	8.94	7.71	8.26	9.66	9.44	9.64	10.85	11.52
18	9.66	9.31	9.58	8.77	8.97	7.52	8.28	9.68	9.43	9.69	10.92	11.56
19	9.68	9.34	9.59	8.83	9.00	7.37	8.20	9.69	9.39	9.73	10.98	11.60
20	9.70	9.37	9.61	8.87	9.04	7.29	7.89	9.71	9.33	9.79	11.04	11.63
21	9.73	9.38	9.63	8.89	9.09	7.26	7.67	9.73	9.26	9.84	11.10	11.67
22	9.75	9.39	9.63	8.89	9.15	7.26	7.61	9.74	9.21	9.90	11.15	11.70
23	9.77	9.40	9.61	8.89	9.21	7.29	7.64	9.75	9.19	9.93	11.19	11.72
24	9.79	9.40	9.54	8.89	9.29	7.34	7.73	9.75	9.19	9.96	11.22	11.75
25	9.80	9.40	9.31	8.89	9.35	7.39	7.86	9.75	9.20	10.01	11.23	11.77
26	9.80	9.41	9.09	8.89	9.40	7.45	8.02	9.72	9.22	10.07	11.23	11.80
27	9.78	9.42	8.94	9.05	9.46	7.49	8.20	9.69	9.26	10.15	11.22	11.81
28	9.70	9.43	8.90	9.26	9.50	7.50	8.37	9.67	9.31	10.24	11.46	11.81
29	9.19	9.44	---	9.34	---	7.51	8.53	9.65	9.35	10.33	10.97	11.80
30	8.78	9.46	---	9.39	---	7.55	8.68	9.62	9.36	10.40	10.80	11.76
31	8.47	---	---	9.45	---	7.62	---	9.60	---	10.40	10.73	---



CORTLAND COUNTY

423541076114701. Local number, C 102.

LOCATION.--Lat 42°35'41", long 76°11'47", Hydrologic Unit 02050102, at Municipal Water Works, Cortland. Owner: City of Cortland.

AQUIFER.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven unused well, diameter 1.25 in (0.03 m), depth 45 ft (13.7 m), 1.25 in (0.03 m) well point.

DATUM.--Land-surface datum is 1136.59 ft (346.434 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of coupling, 2.0 ft (0.61 m) above land-surface datum.

REMARKS.--Water level is affected by pumping from nearby municipal supply wells. This well is a replacement for 423539076114801 (local number C 19), located 80 ft (24.4 m) southwest, which has a period of record from February 1947 to May 1976.

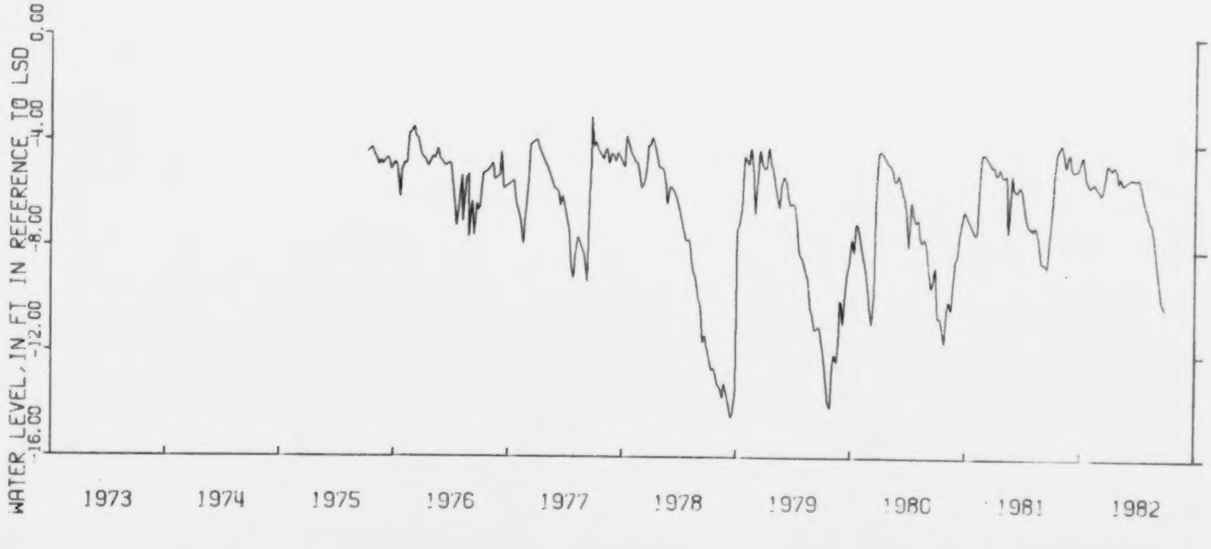
PERIOD OF RECORD.--October 1975 to current year. Unpublished record for October 1975 to September 1977 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.07 ft (0.94 m) below land-surface datum, September 25, 1977;lowest measured, 14.50 ft (4.42 m) below land-surface datum, Dec. 14, 1978.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.01 ft (1.22 m) below land-surface datum, Oct. 30; lowest measured, 10.27 ft (3.13 m) below land-surface datum, Sept. 24.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1981	6.52	JAN 06, 1982	4.45	APR 16, 1982	4.84	JUL 20, 1982	6.20
09	5.05	15	5.32	23	5.03	29	6.53
16	4.36	26	5.59	28	5.47	AUG 06	6.96
30	4.01	29	5.66	MAY 03	5.26	13	7.03
NOV 06	4.45	FEB 11	5.47	14	5.55	20	7.46
13	4.89	19	5.69	21	5.45	30	8.53
20	4.52	26	5.73	27	5.41	SEP 14	10.00
25	4.35	MAR 05	5.93	JUN 07	5.29	24	10.27
30	4.90	12	5.79	23	5.36		
DEC 04	5.05	24	4.77	JUL 02	5.30		
21	5.02	APR 09	4.97	12	5.76		

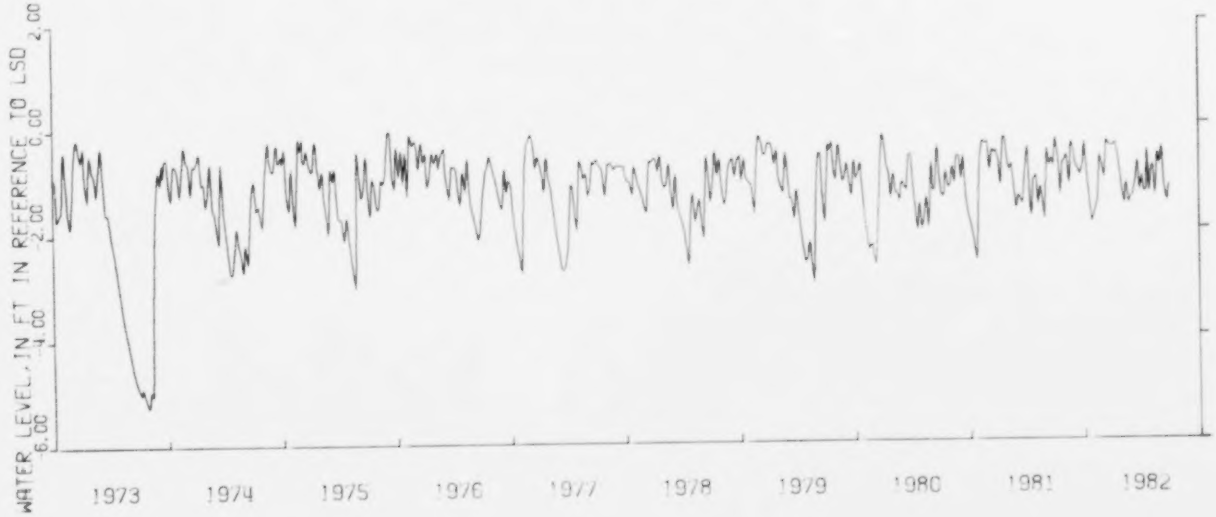


GENESEE COUNTY

425516078032001. Local number, Gs 2.
LOCATION.--Lat 42°55'16", long 78°03'20", Hydrologic Unit 04130003, near Pavilion.
Owner: Angeline C. Rigoni.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 36 in (0.91 m), depth 21 ft (6.4 m), stone-lined.
DATUM.--Altitude of land-surface datum is 1,030 ft (314 m), from topographic map. Measuring point: Painted arrow on top edge of concrete well cover, inside shelter door, 1.12 ft (0.341 m) above land-surface datum.
PERIOD OF RECORD.--September 1950 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.10 ft (0.03 m) below land-surface datum, May 14, 1960, Feb. 28, 1971, and Feb. 13, 1976; lowest measured 6.55 ft (2.00 m) below land-surface datum, Feb. 11, 1961.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 0.29 ft (0.09 m) below land-surface datum, Oct. 3: lowest measured, 1.89 ft (0.58 m) below land-surface datum, Jan. 25.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1981	0.29	JAN 02, 1982	0.38	APR 24, 1982	0.91	JUL 19, 1982	0.53
10	0.68	09	0.89	MAY 01	1.28	26	1.33
17	1.37	18	1.56	08	1.55	31	0.95
24	0.77	25	1.89	13	1.15	AUG 07	0.81
31	0.72	FEB 13	1.48	22	1.55	14	1.39
NOV 07	0.62	20	0.62	29	1.39	21	0.59
14	1.17	MAR 06	1.06	JUN 05	1.35	28	0.80
21	0.37	13	0.34	12	1.12	SEP 04	0.47
28	0.53	20	0.44	19	0.73	11	1.23
DEC 05	0.82	29	0.45	26	1.31	21	1.50
12	0.88	APR 03	0.45	JUL 03	1.03	25	1.20
19	1.00	10	0.40	10	1.33		
30	0.75	17	0.62	17	1.29		



MADISON COUNTY

430056075354102. Local number, M 178.

LOCATION.--Lat 43°00'56", long 75°35'41", Hydrologic Unit 04140202, at Valley Mills.
Owner: Donald L. Greene.

AQUIFER.--Water-table aquifer in gravel of Pleistocene age.

WELL CHARACTERISTICS.--Water-level recorder on drilled observation well, diameter 6 in (0.15 m), depth 16 ft (4.9 m), cased to 16 ft (4.9 m), open end.

DATUM.--Land-surface datum is 573.76 ft (174.882 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of flange, 3.06 ft (0.933 m) above land-surface datum.

REMARKS.--This well drilled April 1974 as a replacement for 430056075354101 (local number M 177), located 10 ft (3.0 m) west, which has a period of record from October 1965 to September 1973 (unpublished).

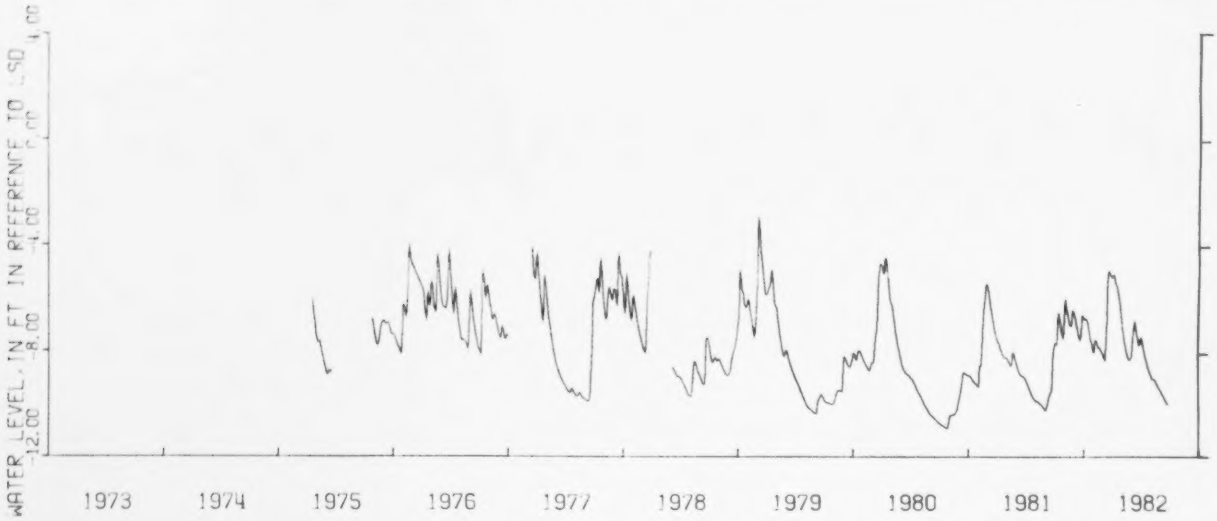
PERIOD OF RECORD.--April 1975 to current year. Unpublished record for April 1975 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.60 ft (0.79 m) below land-surface datum, Mar. 5, 1979; lowest, 10.97 ft (3.34 m) below land-surface datum, Oct. 24, 25, 1980.

EXTREMES FOR CURRENT YEAR.--Highest water level, 4.84 ft (1.48 m) below land-surface datum, Mar. 21; lowest, 10.08 ft (3.07 m) below land-surface datum, Sept. 23.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.70	6.05	6.69	6.82	8.10	8.13	5.25	7.04	8.24	7.48	8.98	9.56
2	7.73	6.13	6.75	6.87	8.07	8.16	5.34	7.14	8.01	7.47	9.01	9.59
3	7.77	6.25	6.82	6.90	7.97	8.20	5.32	7.24	7.73	7.51	9.04	9.61
4	7.79	6.35	6.88	6.85	7.70	8.22	5.04	7.33	7.59	7.59	9.07	9.63
5	7.80	6.44	6.94	6.78	7.60	8.25	5.10	7.42	7.53	7.68	9.10	9.66
6	7.79	6.51	7.00	6.75	7.48	8.29	5.13	7.49	7.35	7.75	9.14	9.68
7	7.58	6.60	7.04	6.78	7.49	8.30	5.28	7.56	7.03	7.82	9.17	9.71
8	7.04	6.67	7.11	6.83	7.53	8.35	5.39	7.64	6.85	7.88	9.19	9.73
9	6.65	6.65	7.17	6.84	7.56	8.38	5.43	7.70	6.81	7.93	9.14	9.76
10	6.57	6.68	7.22	6.91	7.64	8.40	5.45	7.77	6.85	7.99	9.08	9.78
11	6.59	6.73	7.27	6.98	7.70	8.17	5.46	7.84	6.93	8.04	9.06	9.81
12	6.67	6.83	7.33	7.08	7.74	7.30	5.46	7.90	7.02	8.10	9.07	9.84
13	6.76	6.90	7.39	7.13	7.82	6.67	5.42	7.95	7.10	8.16	9.10	9.86
14	6.84	6.97	7.43	7.18	7.87	6.03	5.48	8.01	7.19	8.22	9.13	9.89
15	6.90	7.03	7.46	7.25	7.90	5.72	5.58	8.06	7.27	8.27	9.16	9.91
16	6.99	7.08	7.49	7.32	7.94	5.60	5.66	8.11	7.35	8.33	9.20	9.93
17	7.08	7.12	7.55	7.40	7.84	5.20	5.75	8.15	7.40	8.38	9.23	9.96
18	7.13	7.18	7.58	7.47	7.86	5.00	5.77	8.20	7.42	8.43	9.26	9.98
19	7.22	7.22	7.62	7.54	7.88	4.92	5.85	8.25	7.46	8.47	9.29	10.00
20	7.30	7.09	7.65	7.61	7.91	4.95	5.96	8.29	7.53	8.51	9.32	10.02
21	7.38	6.81	7.68	7.67	7.95	4.86	6.05	8.33	7.59	8.55	9.34	10.04
22	7.44	6.65	7.71	7.73	7.99	4.88	6.14	8.37	7.66	8.59	9.36	10.06
23	7.49	6.54	7.50	7.75	8.00	4.99	6.24	8.39	7.72	8.63	9.38	10.08
24	7.54	6.47	6.90	7.75	8.02	5.07	6.35	8.38	7.78	8.68	9.39	10.06
25	7.58	6.46	6.65	7.75	8.04	5.14	6.46	8.38	7.84	8.72	9.40	10.04
26	7.61	6.48	6.57	7.75	8.07	5.11	6.57	8.39	7.90	8.76	9.42	10.05
27	7.44	6.47	6.55	7.85	8.10	5.15	6.67	8.41	7.95	8.81	9.44	10.05
28	6.62	6.50	6.62	7.98	8.13	5.28	6.77	8.43	8.00	8.85	9.47	10.05
29	6.01	6.57	6.67	7.98	---	5.37	6.86	8.45	7.93	8.88	9.49	10.05
30	5.94	6.65	6.74	8.00	---	5.42	6.96	8.46	7.60	8.92	9.52	10.06
31	5.98	---	6.79	8.10	---	5.41	---	8.40	---	8.95	9.54	---



NIAGARA COUNTY

430655079022001. Local number, Ni 69.

LOCATION.--Lat 43°06'55", long 79°02'20", Hydrologic Unit 04120104, 20th Street and Beech Avenue, Niagara Falls. Owner: City of Niagara Falls.

AQUIFER.--Confined and water-table aquifer in Lockport Dolomite of Middle Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in (0.20 m) to 6 in (0.15 m), depth 36 ft (11.0 m), cased 8-in (0.20-m) 0 ft (0.0 m) to 17 ft (5.2 m), open hole 6-in (0.15-m) 17 ft (5.2 m) to 36 ft (11.0 m).

DATUM.--Land-surface datum is 596.21 ft (181.725 m) U.S. Lake Survey datum (levels by Uhl, Hall, and Rich). Measuring point: Top of 2-in (0.05 m) opening in 6 in (0.15 m) plug of 8 in (0.20 m) extended casing, 3.60 ft (1.097 m) above land-datum.

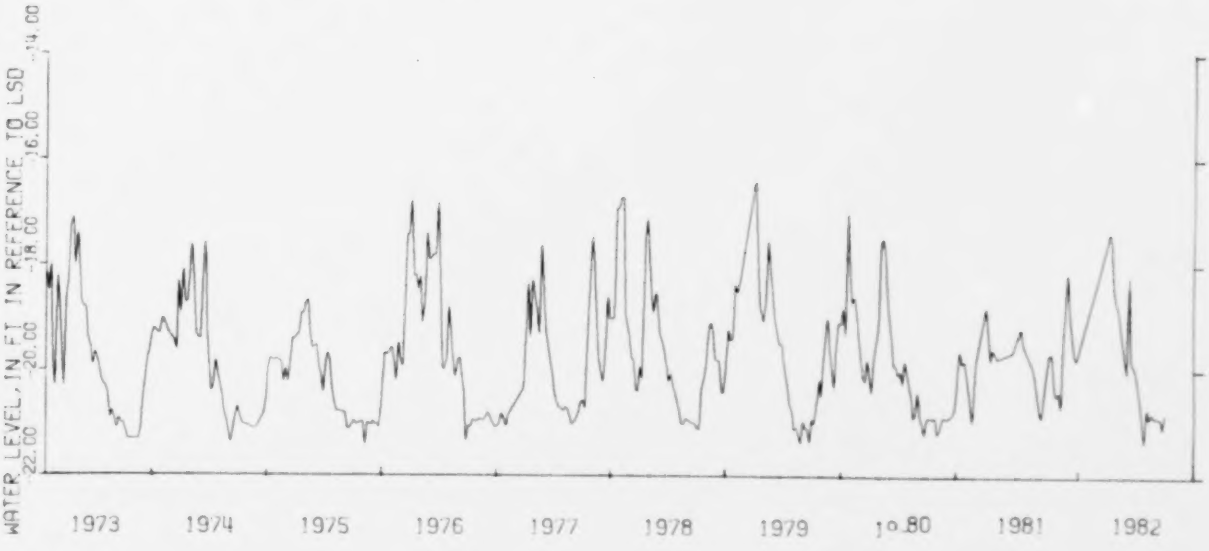
PERIOD OF RECORD.--October 1958 to current year. Unpublished record for October 1958 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.39 ft (5.00 m) below land-surface datum, Mar.5, 1979; lowest measured, 22.21 ft (6.77 m) below land-surface datum, Aug. 3, 1959.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 17.38 ft (5.30 m) below land-surface datum, Apr. 5; lowest measured, 21.36 ft (6.51 m) below land-surface datum, July. 26.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1981	19.67	DEC 21, 1981	19.80	MAY 10, 1982	19.10	AUG 16, 1982	20.78
13	20.40	28	19.70	JUN 01	20.06	23	20.86
19	20.47	MAR 29, 1982	17.58	07	18.20	SEP 07	20.87
26	20.39	APR 05	17.38	14	19.80	16	20.90
NOV 02	20.70	12	17.54	28	20.00	20	21.10
23	18.16	19	18.40	JUL 26	21.36	27	20.80
30	18.87	26	18.67	AUG 02	20.70		
DEC 14	19.65	MAY 03	18.80	09	20.90		

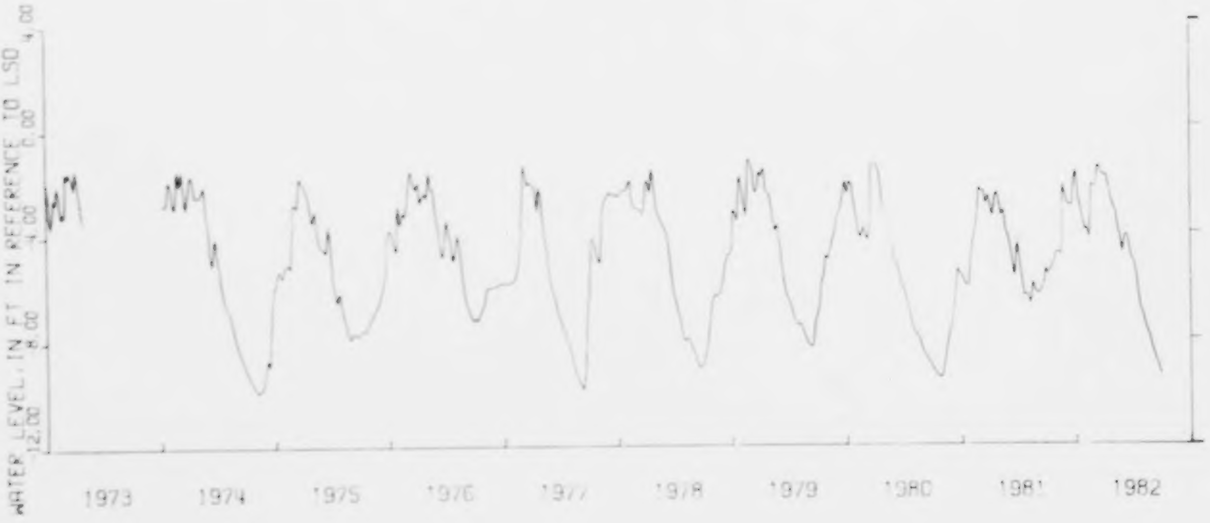


NIAGARA COUNTY

431308078544501. Local number, Ni 70.
LOCATION.--Lat 43°13'08", long 78°54'45", Hydrologic Unit 04130001, near Ransomville.
Owner: Calvin C. Schultz.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 4 ft (1.2 m) to 5 ft (1.5 m) (reported), stone-lined, depth 24 ft (7.3 m).
DATUM.--Altitude of land-surface datum is 335 ft (102 m), from topographic map. Measuring point: Top of 1-in (0.02 m) hole in steel cover, at land-surface datum.
PERIOD OF RECORD.--August 1972 to current year. Unpublished record for August 1972 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.14 ft (0.35 m) below land-surface datum, Feb. 24, 1979; lowest measured, 9.91 ft (3.02 m) below land-surface datum, Nov. 9, 1974.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 1.43 ft (0.44 m) below land-surface datum, Mar. 13; lowest measured, 9.35 ft (2.85 m) below land-surface datum, Sept. 25.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1981	5.56	JAN 02, 1982	1.62	APR 03, 1982	1.82	JUL 03, 1982	5.08
10	5.41	10	2.77	10	1.86	10	5.40
17	5.25	16	2.98	17	2.32	18	6.37
24	5.10	23	3.53	24	2.76	24	6.90
31	4.69	30	3.90	MAY 01	2.98	31	7.07
NOV 07	4.71	FEB 06	3.82	08	3.24	AUG 07	7.45
14	4.83	13	4.20	15	3.91	14	7.68
22	2.15	20	2.17	22	4.16	21	7.93
28	2.57	27	2.24	29	4.76	28	8.34
DEC 05	2.87	MAR 06	2.18	JUN 05	4.11	SEP 04	8.56
12	2.93	13	1.43	12	4.05	11	8.83
19	3.00	21	1.60	19	4.52	18	9.03
26	2.06	27	1.78	25	4.90	25	9.35



ONTARIO COUNTY

425840077133901. Local number, Ot 900.

LOCATION.--Lat 42°58'40", long 77°13'39", Hydrologic Unit 04140201, at New York State Thruway Interchange 43, near Manchester.

Owner: New York State Thruway Authority.

AQUIFER.--Confined aquifer in Camillus Shale of the Salina Group of Late Silurian age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in (0.15 m), depth 139 ft (42.4 m), cased to 11 ft (3.4 m), open hole.

DATUM.--Altitude of land-surface datum is 555 ft (169 m), from topographic map. Measuring point: Top of casing, 11.43 ft (3.484 m) above land-surface datum.

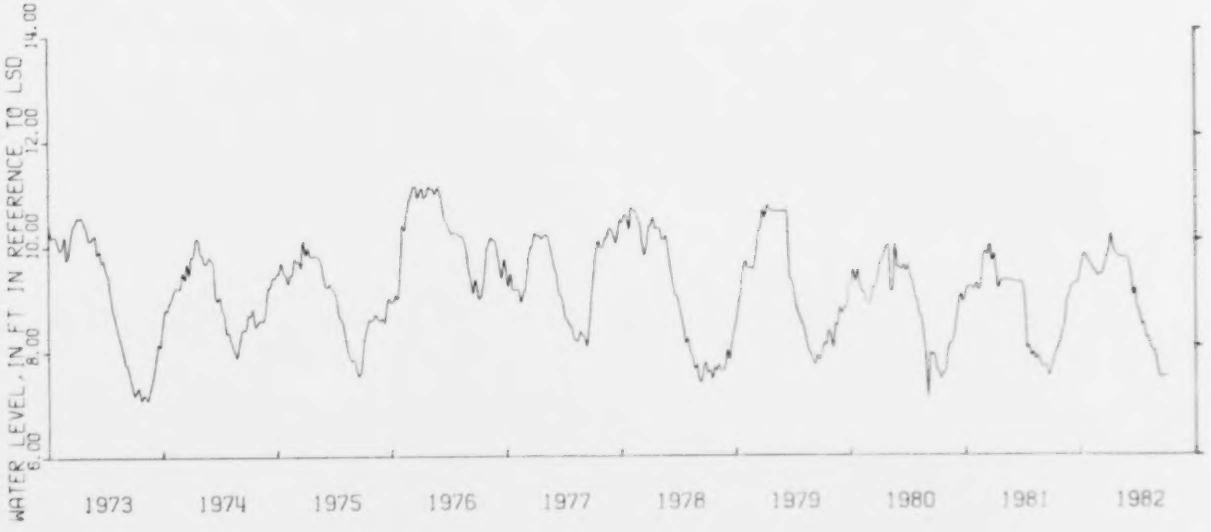
PERIOD OF RECORD.--May 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.14 ft (3.40 m) above land-surface datum, Mar. 15, 1976; lowest measured 4.59 ft (1.40 m) above land-surface datum, Nov. 11, 1957.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 10.19 ft (3.11 m) above land-surface datum, Apr. 5; lowest measured, 7.47 ft (2.28 m) above land-surface datum, Sept. 13.

WATER LEVEL, IN FEET ABOVE LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1981	7.81	DEC 28, 1981	9.47	APR 26, 1982	9.77	JUL 19, 1982	8.50
12	7.94	JAN 04, 1982	9.69	MAY 03	9.74	26	8.21
19	8.01	11	9.80	10	9.75	AUG 02	8.23
26	8.16	FEB 22	9.38	17	9.73	09	8.09
NOV 02	8.31	MAR 01	9.43	24	9.75	16	7.98
09	8.48	08	9.41	31	9.70	23	7.96
16	8.97	15	9.54	JUN 07	9.40	31	7.62
23	8.99	22	9.72	14	9.01	SEP 06	7.49
30	9.19	29	9.85	21	9.15	13	7.47
DEC 07	9.21	APR 05	10.19	28	8.76	20	7.48
14	9.26	12	9.92	JUL 05	8.71	27	7.51
21	9.25	19	9.81	12	8.45		



OTSEGO COUNTY

424136075025101. Local number, Og 23.

LOCATION.--Lat 42°41'36", long 75°02'51", Hydrologic Unit 02050101, at "Wild Creek Farm", 0.6 mi (10 km) northeast of intersection of State Highway 205 and Kallan Road, 2.2 mi (3.5 km) north of Hartwick, and 3.2 mi (5.1 km) southeast of Oaksville.
Owner: Thomas Kallan.

AQUIFER.--Water-table aquifer in till of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in (0.91 m), depth 15 ft (4.6 m), stone-lined.

DATUM.--Land-surface datum is 1,432.44 ft (436.609 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole drilled through concrete well cover, at land-surface datum.

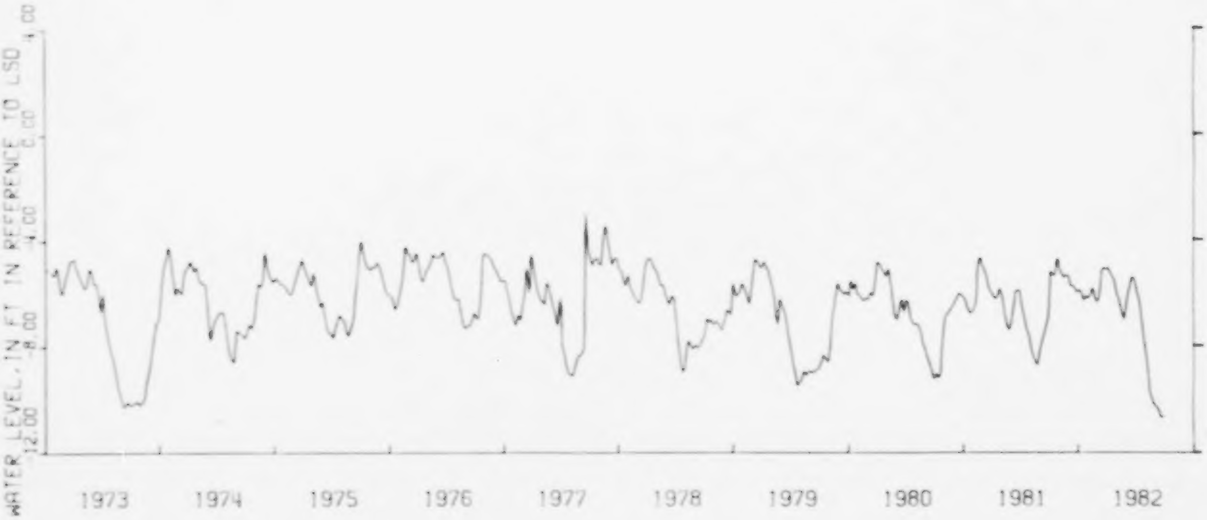
PERIOD OF RECORD.--May 1953 to current year. Records for May 1953 to September 1976 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft (0.91 m) below land-surface datum, Apr. 2, 1960, Sept. 19, 1977; lowest measured, 12.66 ft (3.86 m) below land-surface datum, Nov. 14, 1964.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 4.65 ft (1.42 m) below land-surface datum, Oct. 26; lowest measured, 10.70 ft (3.26 m) below land-surface datum, Sept. 19.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1981	5.15	JAN 03, 1982	5.86	APR 04, 1982	5.02	JUL 04, 1982	5.96
11	5.30	10	6.00	11	5.22	11	6.22
18	5.32	17	6.27	18	5.38	18	6.98
26	4.65	24	6.10	25	5.56	25	7.70
NOV 01	5.10	31	6.19	MAY 02	6.08	AUG 01	8.37
08	5.25	FEB 07	6.04	09	6.24	08	9.00
15	5.40	14	5.78	16	6.60	15	9.79
22	5.30	21	6.14	23	7.00	22	9.99
29	5.34	28	6.32	30	6.50	29	10.22
DEC 06	5.72	MAR 07	6.18	JUN 06	6.01	SEP 05	10.30
13	5.70	14	5.12	13	5.70	12	10.45
20	5.79	21	5.02	20	5.38	19	10.70
27	5.94	28	5.10	27	5.50	26	10.66



STEUBEN COUNTY

423121077281201. Local number, Sb 471.

LOCATION.--Lat 42°31'21", long 77°28'12", Hydrologic Unit 02050105, near Cohocton.
Owner: Myron Crouch.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in (0.06 m), depth 24 ft (7.3 m), filled in from original depth of 25 ft (7.6 m), cased to 24 ft (7.3 m), 1.25-in (0.03 m) well point (60-gauze screen 24 ft or 7.3 m to 25 ft or 7.6 m, damaged during well installation).

DATUM.--Land-surface datum is 1,303.32 ft (397.253 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.

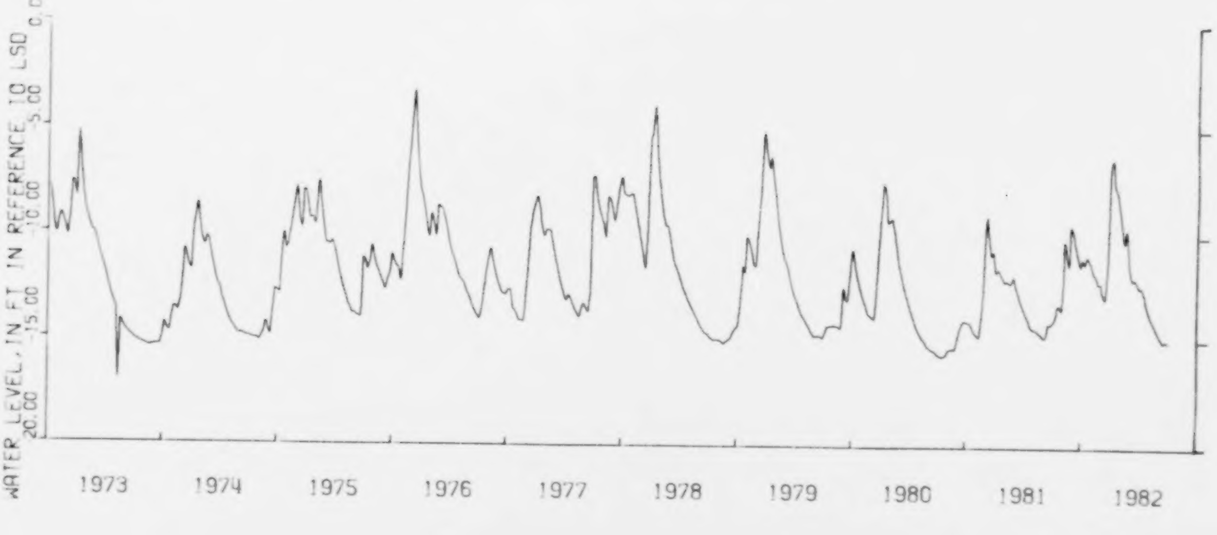
PERIOD OF RECORD.--October 1965 to current year. Unpublished record for October 1965 to September 1976 is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.46 ft (0.14 m) below land-surface datum, June 26, 1972; lowest measured, 17.50 ft (5.33 m) below land-surface datum, Oct. 28, 1965.

EXTREMES FOR CURRENT YEAR.--Highest water level measured, 6.27 ft (1.91 m) below land-surface datum, Apr. 4; lowest measured, 14.97 ft (4.56 m) below land-surface datum, Sept. 12.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1981	13.93	JAN 03, 1982	11.27	APR 18, 1982	7.87	JUL 19, 1982	13.17
12	13.26	10	10.86	25	8.72	25	13.39
18	13.23	24	11.28	MAY 02	9.64	31	13.71
25	13.50	31	11.70	09	10.30	AUG 07	13.92
NOV 01	10.16	FEB 07	11.80	16	9.60	15	14.16
08	10.80	14	12.19	23	11.26	22	14.37
15	11.39	24	12.18	30	11.79	29	14.60
22	9.46	28	12.55	JUN 06	12.05	SEP 05	14.79
29	9.80	MAR 07	12.80	13	11.94	12	14.97
DEC 06	10.49	13	12.95	20	12.13	19	14.84
15	11.06	28	6.58	27	12.40	26	14.96
22	11.37	APR 04	6.27	JUL 04	12.33	29	14.92
27	11.00	11	7.60	14	12.76		

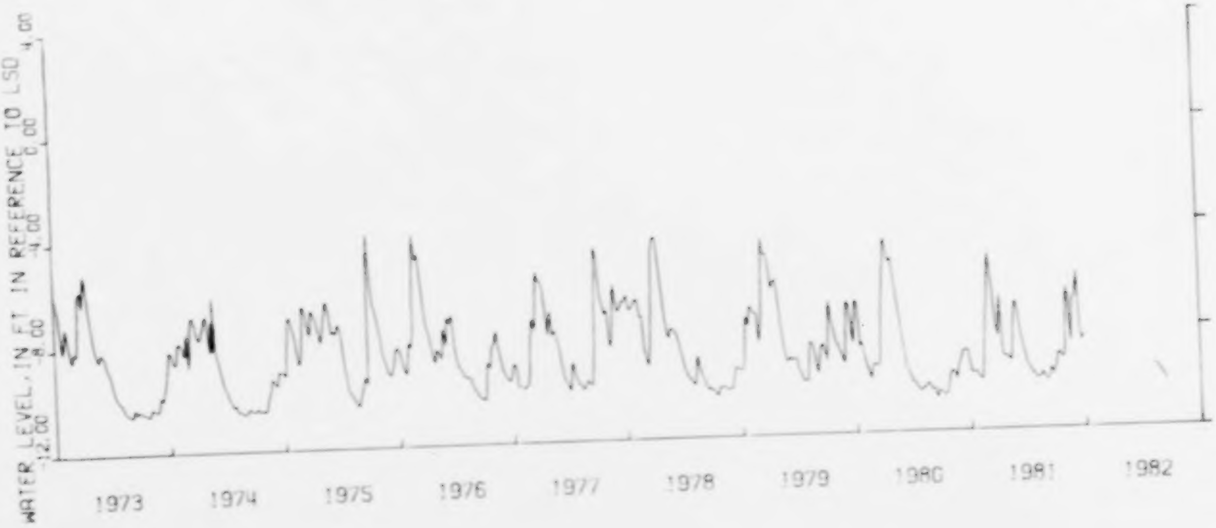


STEUBEN COUNTY

422445077203301. Local number, Sb 472.
LOCATION.--Lat 42°24'45", long 77°20'33", Hydrologic Unit 02050105, near Kanona.
Owner: David Owens.
AQUIFER.--Water-table aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in (0.06 m), depth 17 ft (5.2 m), filled in from original depth of 18 ft (5.5 m), cased to 16 ft (4.9 m), 1.25 in (0.03 m) well point (60-gauze screen 16 ft or 4.9 m to 18 ft or 5.5 m, damaged during well installation).
DATUM.--Land-surface datum is 1,209.78 ft (368.739 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3.00 ft (0.914 m) above land-surface datum.
PERIOD OF RECORD.--November 1965 to current year. Unpublished record for November 1965 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.64 ft (1.11 m) below land-surface datum, June 25, 1972; lowest measured, 10.84 ft (3.30 m) below land-surface datum, Sept. 22, 1966.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 6.15 ft (1.87 m) below land-surface datum, Dec. 6; lowest measured, 10.25 ft (3.12 m) below land-surface datum, Sept. 13.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1981	9.20	NOV 01, 1981	6.74	NOV 29, 1981	7.06	DEC 27, 1981	8.50
11	9.15	08	7.09	DEC 06	6.15	AUG 09, 1982	9.65
18	9.36	15	8.76	13	8.22	SEP 13	10.25
25	9.29	22	7.09	20	8.72		

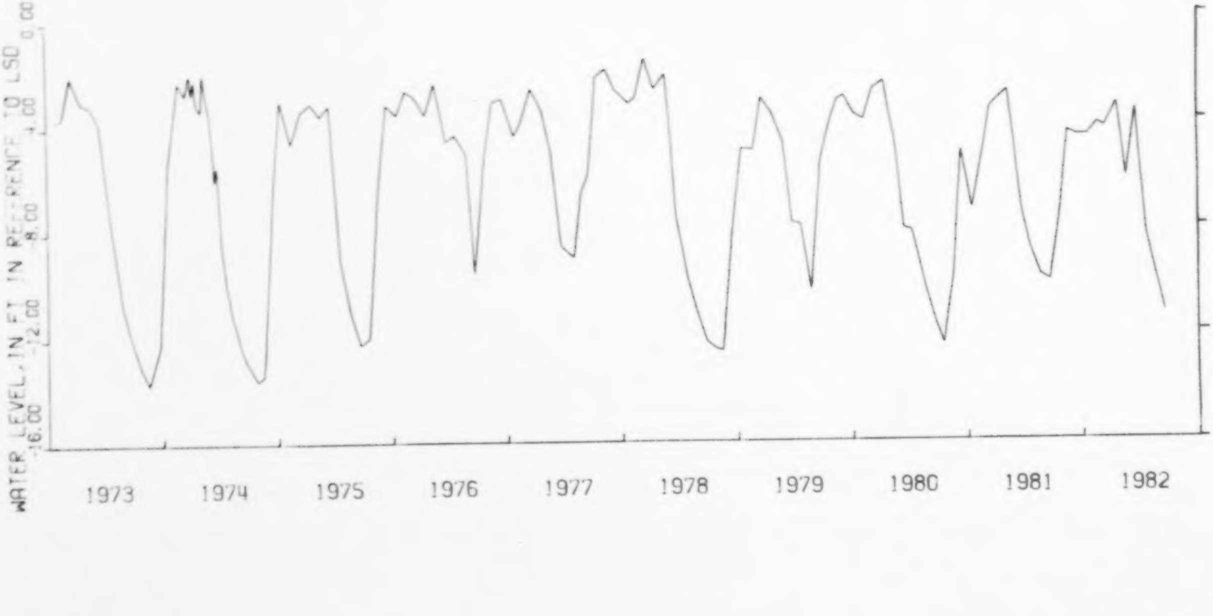


WYOMING COUNTY

423739077595501. Local number, Wo 1.
LOCATION.--Lat 42°37'39", long 77°59'55", Hydrologic Unit 04130002, Letchworth State Park, near Castile.
Owner: New York State Department of Environmental Conservation.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 2 in (0.05 m), depth 14 ft (4.3 m), well point (60-gauze screen 12 ft or 3.7 m to 14 ft or 4.3 m).
DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Top of 2-in (0.05 m) by 1-in (0.02 m) reducing coupling, 3.33 ft (1.015 m) above land-surface datum.
PERIOD OF RECORD.--November 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.5 ft (0.15 m) below land-surface datum, Apr. 5, 1947; lowest measured, dry, Dec. 6-27, 1964, Jan. 2, 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level measured, 3.34 ft (1.02 m) below land-surface datum, Apr. 21; lowest measured, 11.20 ft (3.41 m) below land-surface datum, Sept. 13.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 1981	7.31	JAN 16, 1982	4.53	APR 21, 1982	3.34	JUL 20, 1982	8.29
NOV 13	4.37	FEB 17	4.08	MAY 19	6.13	AUG 08	9.42
DEC 13	4.53	MAR 11	4.24	JUN 18	3.54	SEP 13	11.20

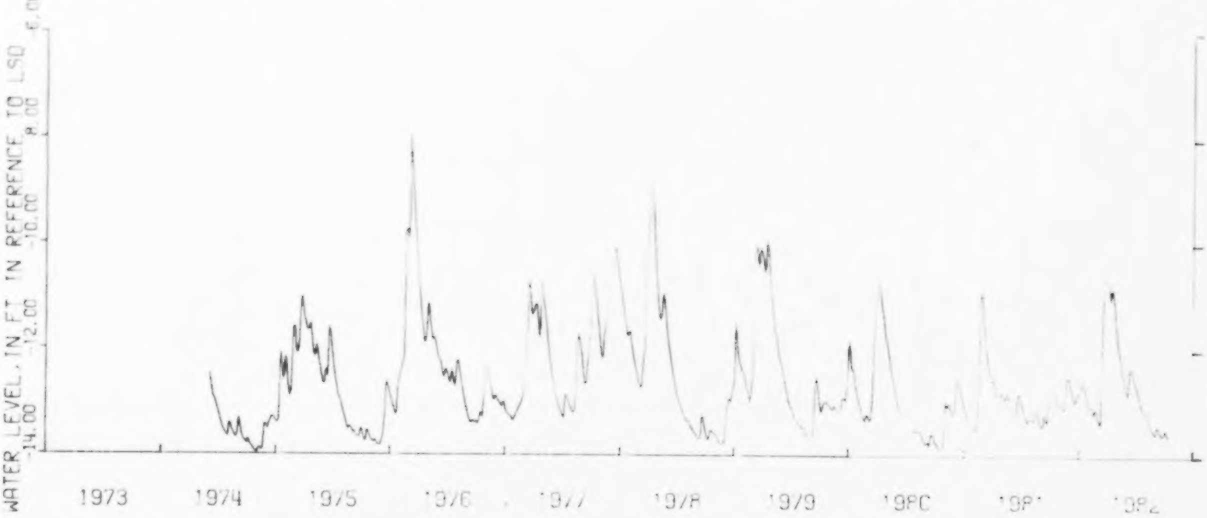


WYOMING COUNTY

423743078070802. Local number, Wo 4.
LOCATION.--Lat 42°37'43", long 78°07'08". Hydrologic Unit 04130002, near Gainesville.
Owner: Letchworth Central School.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 20 ft (6.1 m), cased to 20 ft (6.1 m), open end.
DATUM.--Altitude of land-surface datum is 1,610 ft (491 m), from topographic map. Measuring point: Top of casing, 2.60 ft (0.792 m) above land-surface datum.
REMARKS.--This well drilled May 1974 as a replacement for 423743078070801 (local number Wo 2), located 25 ft (7.6 m) southeast, which has a period of record from November 1965 to May 1974 (unpublished).
PERIOD OF RECORD.--May 1974 to current year. Unpublished record for May 1974 to September 1976 is available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.89 ft (2.40 m) below land-surface datum, Mar. 5, 1976; lowest, 14.00 ft (4.27 m) below land-surface datum, Nov. 3, 1974.
EXTREMES FOR CURRENT YEAR.--Highest water level, 10.53 ft (3.21 m) below land-surface datum, Mar. 23,26; lowest, 13.62 ft (4.15 m) below land-surface datum, Sept. 27.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.92	13.02	12.58	12.84	13.05	13.29	10.59	11.77	12.79	12.66	13.19	13.57
2	12.90	13.04	12.61	12.86	13.05	13.31	10.57	11.83	12.82	12.68	13.22	13.56
3	12.88	13.06	12.65	12.89	13.05	13.33	10.56	11.88	12.85	12.70	13.24	13.43
4	12.87	13.07	12.68	12.86	13.05	13.33	10.61	11.92	12.87	12.73	13.23	13.38
5	12.87	13.09	12.70	12.71	13.05	13.34	10.71	11.98	12.86	12.76	13.20	13.38
6	12.87	13.09	12.72	12.62	13.06	13.34	10.72	12.02	12.56	12.79	13.22	13.40
7	12.86	13.06	12.74	12.58	13.07	13.35	10.79	12.07	12.36	12.83	13.26	13.43
8	12.80	13.04	12.77	12.58	13.10	13.37	10.92	12.10	12.27	12.85	13.28	13.45
9	12.75	13.05	12.80	12.57	13.11	13.40	10.98	12.12	12.27	12.86	13.30	13.48
10	12.71	13.06	12.82	12.58	13.11	13.41	11.06	12.15	12.30	12.88	13.30	13.50
11	12.71	13.07	12.84	12.59	13.12	13.41	11.08	12.18	12.35	12.90	13.32	13.52
12	12.72	13.09	12.86	12.63	13.15	13.18	11.09	12.23	12.40	12.93	13.34	13.55
13	12.75	13.10	12.88	12.64	13.17	12.73	10.95	12.26	12.43	12.96	13.36	13.57
14	12.78	13.11	12.91	12.65	13.20	12.02	10.84	12.30	12.39	12.98	13.39	13.58
15	12.80	13.13	12.93	12.68	13.22	11.63	10.81	12.34	12.38	13.00	13.41	13.55
16	12.84	13.07	12.95	12.70	13.18	11.33	10.81	12.39	12.39	13.02	13.43	13.54
17	12.87	12.91	12.96	12.73	13.11	11.06	10.81	12.44	12.37	13.04	13.45	13.56
18	12.89	12.78	12.97	12.75	13.07	10.90	10.87	12.47	12.36	13.06	13.45	13.58
19	12.92	12.70	12.98	12.78	13.06	10.85	10.94	12.50	12.38	13.07	13.47	13.59
20	12.93	12.63	12.98	12.80	13.08	10.87	11.01	12.54	12.43	13.09	13.49	13.60
21	12.95	12.53	12.98	12.83	13.11	10.72	11.10	12.57	12.46	13.10	13.50	13.60
22	12.98	12.48	13.05	12.86	13.13	10.56	11.17	12.61	12.49	13.10	13.51	13.61
23	13.00	12.46	13.00	12.88	13.17	10.55	11.25	12.64	12.51	13.10	13.52	13.60
24	13.01	12.45	12.87	12.90	13.19	10.56	11.33	12.66	12.54	13.13	13.54	13.59
25	13.02	12.46	12.81	12.92	13.19	10.56	11.40	12.68	12.58	13.16	13.55	13.60
26	13.04	12.48	12.75	12.94	13.20	10.54	11.47	12.69	12.62	13.19	13.56	13.61
27	13.02	12.50	12.75	12.96	13.24	10.62	11.53	12.71	12.66	13.21	13.57	13.56
28	12.99	12.51	12.76	12.98	13.26	10.75	11.60	12.73	12.68	13.17	13.58	13.48
29	12.97	12.52	12.78	13.00	---	10.84	11.66	12.71	12.65	13.14	13.59	13.46
30	12.97	12.56	12.81	13.02	---	10.89	11.72	12.74	12.63	13.14	13.59	13.46
31	13.00	---	12.83	13.04	---	10.75	---	12.77	---	13.16	13.59	---



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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons